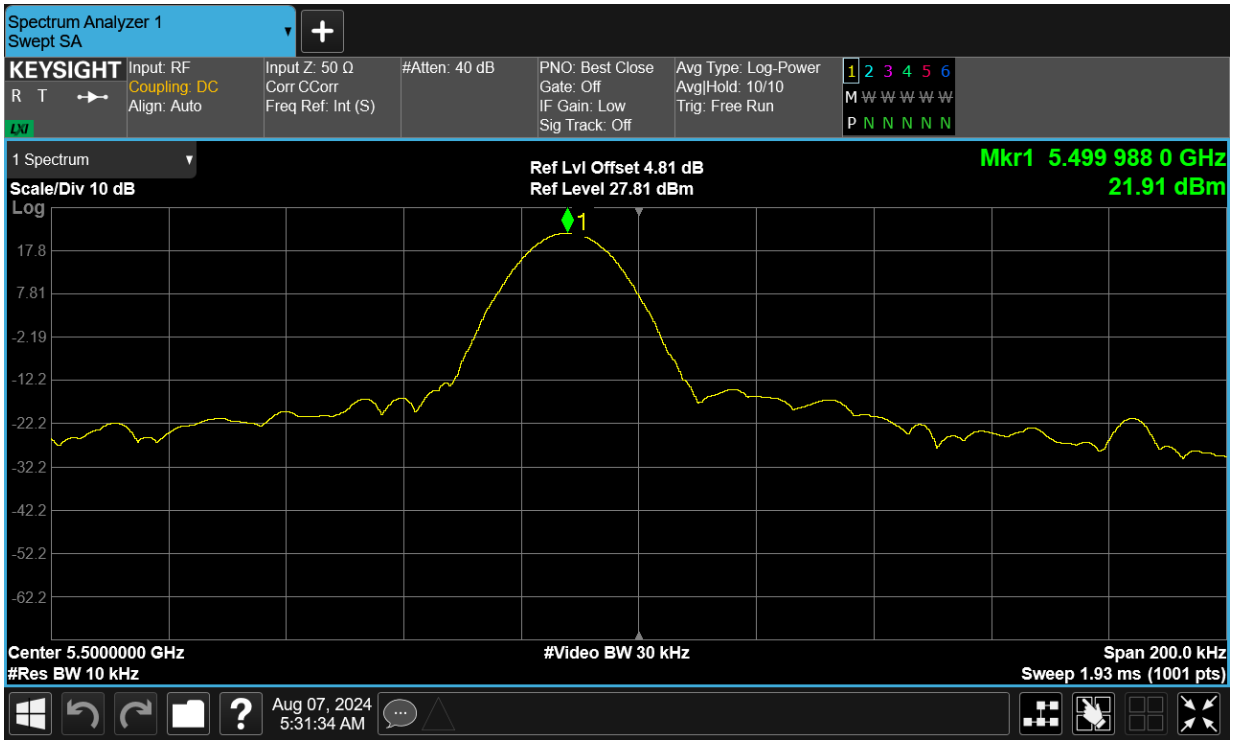
Test Data

Frequency Stability

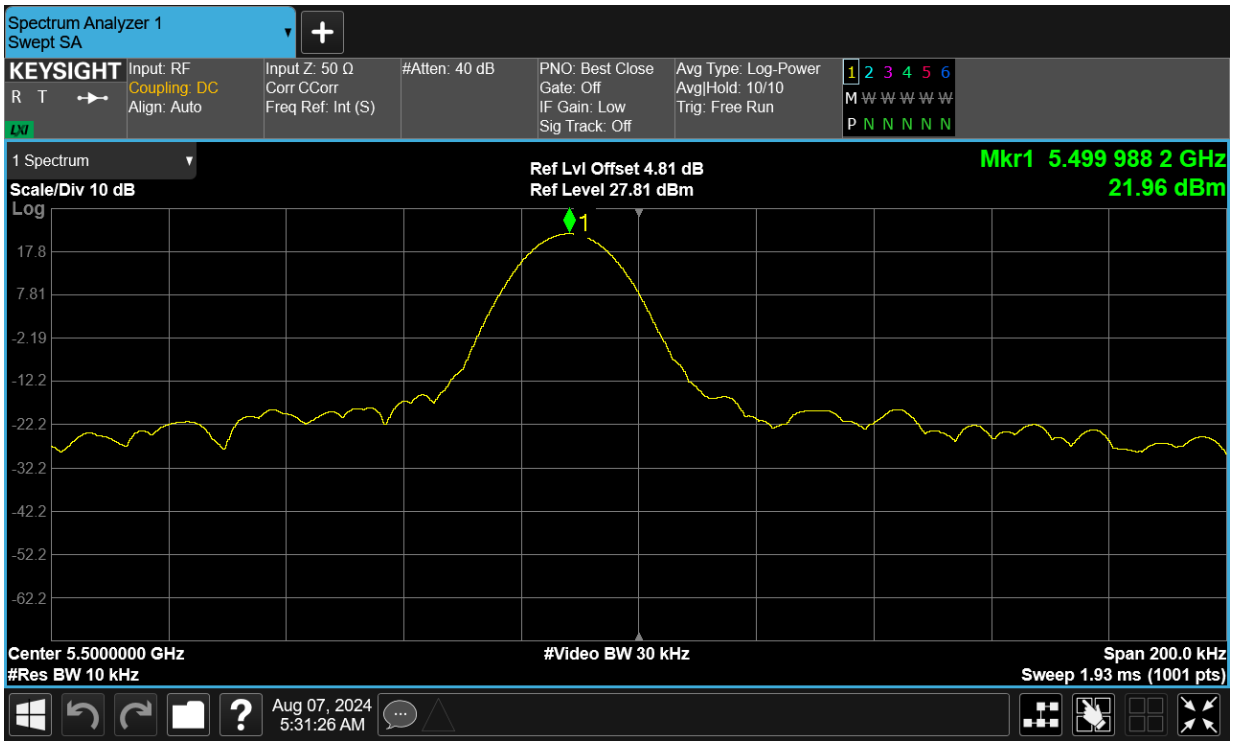
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
LVLT	a	5500	Ant1	5499.988	-2.18	Within authorized band	Pass
LVNT	a	5500	Ant1	5499.9882	-2.15		Pass
NVHT	a	5500	Ant1	5499.9886	-2.07		Pass
NVLT	a	5500	Ant1	5499.9892	-1.96		Pass
NVNT	a	5500	Ant1	5499.9902	-1.78		Pass
LVLT	ac80	5530	Ant1	5529.9904	-1.74		Pass
LVNT	ac80	5530	Ant1	5529.9908	-1.66		Pass
NVHT	ac80	5530	Ant1	5529.9914	-1.56		Pass
NVLT	ac80	5530	Ant1	5529.9928	-1.3		Pass
NVNT	ac80	5530	Ant1	5529.9948	-0.94		Pass
LVLT	n40	5510	Ant1	5509.9884	-2.11		Pass
LVNT	n40	5510	Ant1	5509.9888	-2.03		Pass
NVHT	n40	5510	Ant1	5509.9892	-1.96		Pass
NVLT	n40	5510	Ant1	5509.9898	-1.85		Pass
NVNT	n40	5510	Ant1	5509.9908	-1.67		Pass

Remark: “NTNV” means Normal Temperature Normal Voltage, “NVHT” means Normal Voltage High Temperature, “NVLT” means Normal Voltage Low Temperature, “LVNT” means Low Voltage Normal Temperature, “HVNT” means High Voltage Normal Temperature.

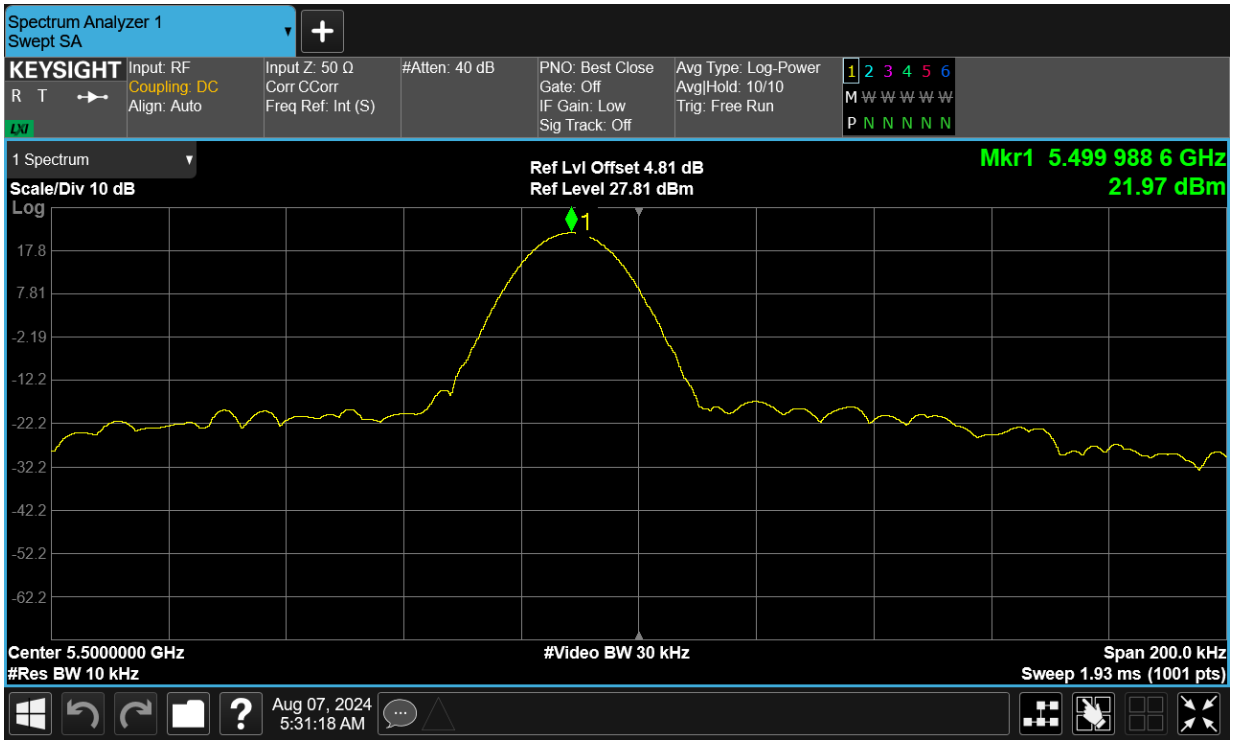
Test Graphs
Freq. Stability LVLT a 5500MHz Ant1



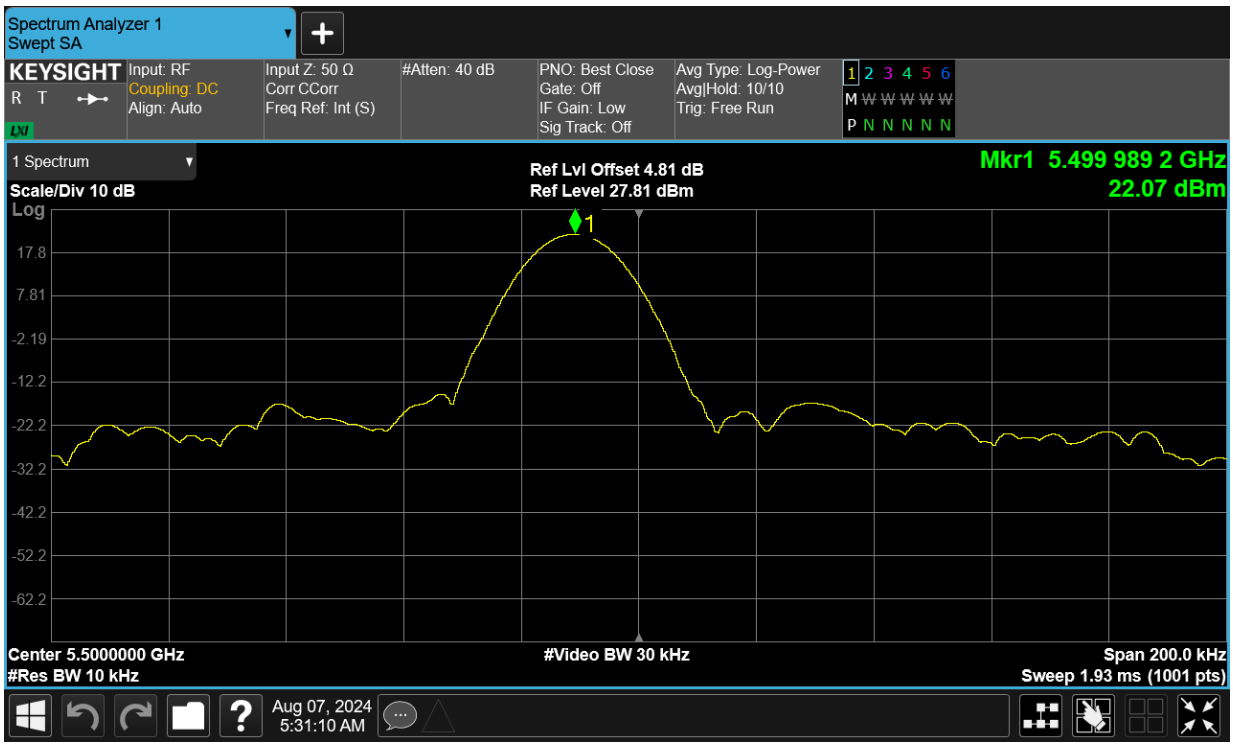
Freq. Stability LVNT a 5500MHz Ant1



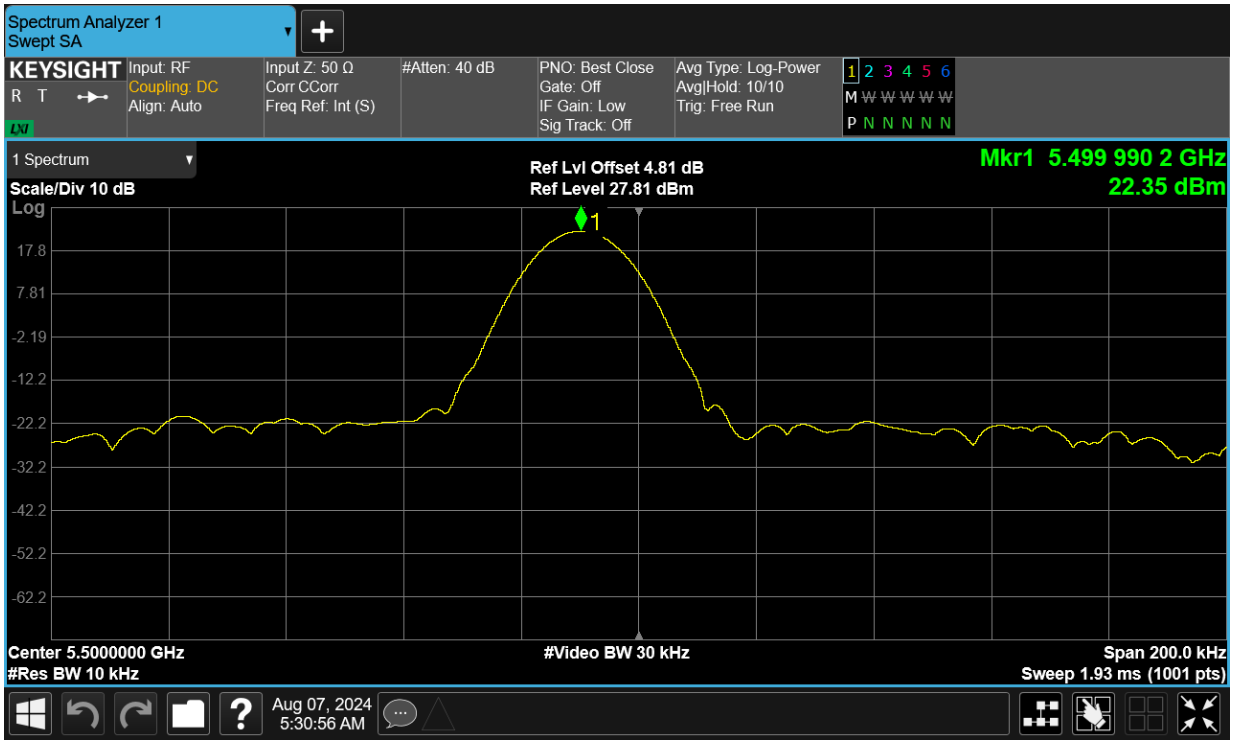
Freq. Stability NVHT a 5500MHz Ant1



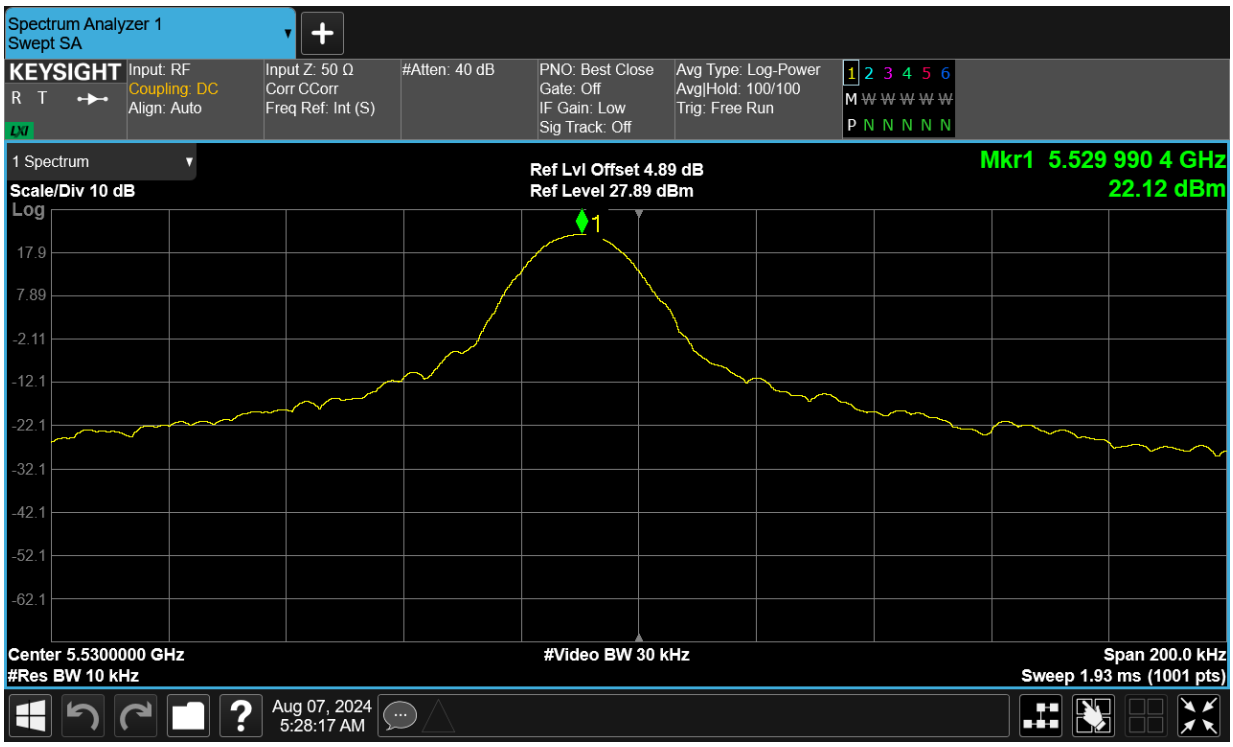
Freq. Stability NVLT a 5500MHz Ant1



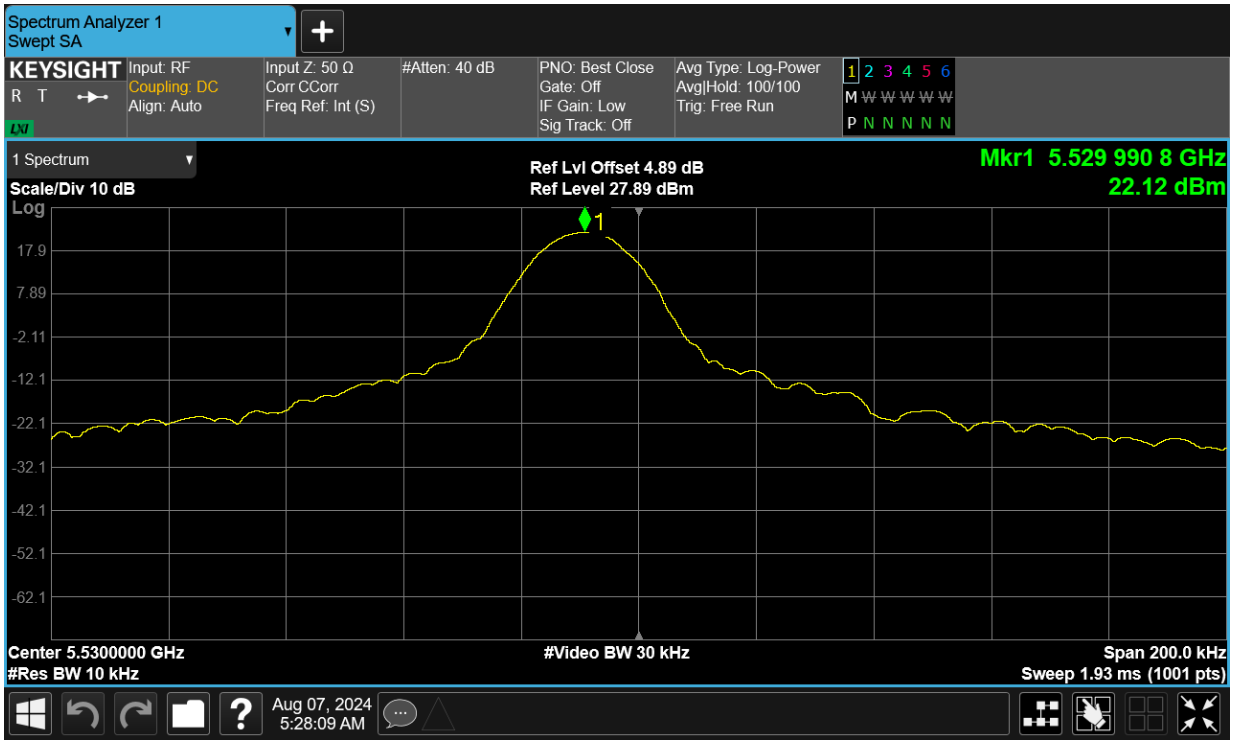
Freq. Stability NVNT a 5500MHz Ant1



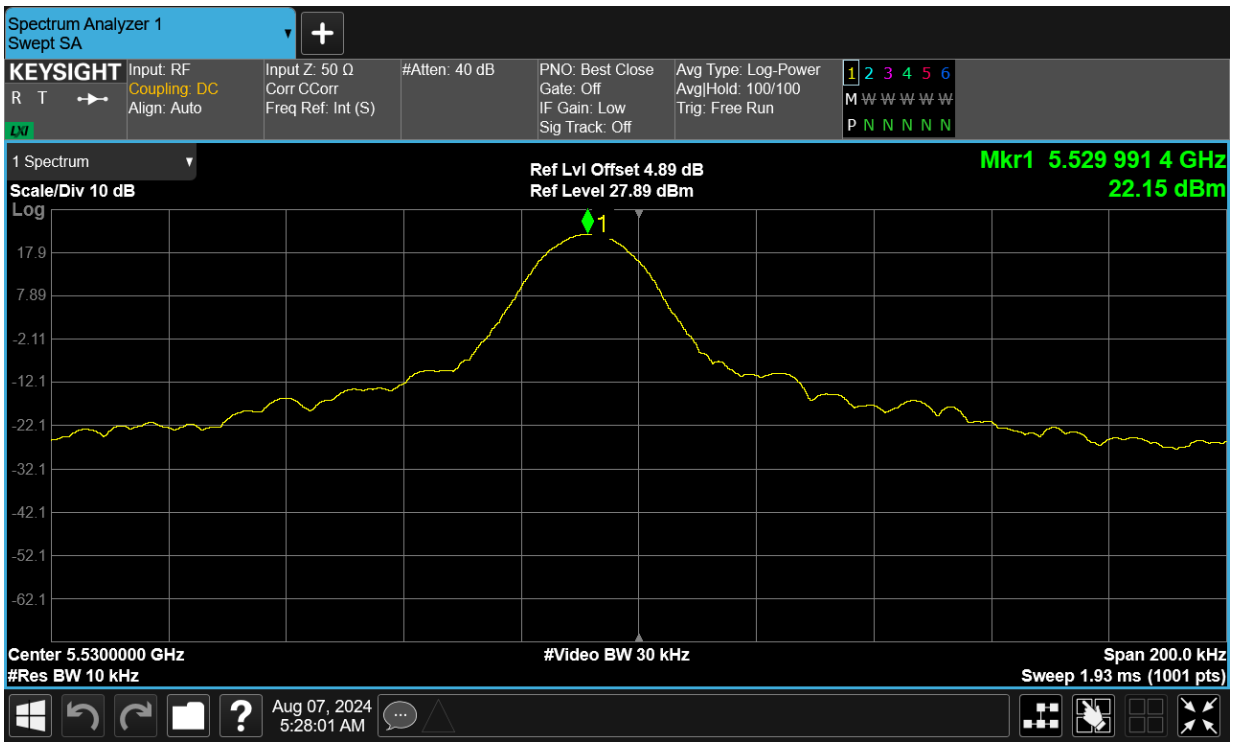
Freq. Stability LVLT ac80 5530MHz Ant1



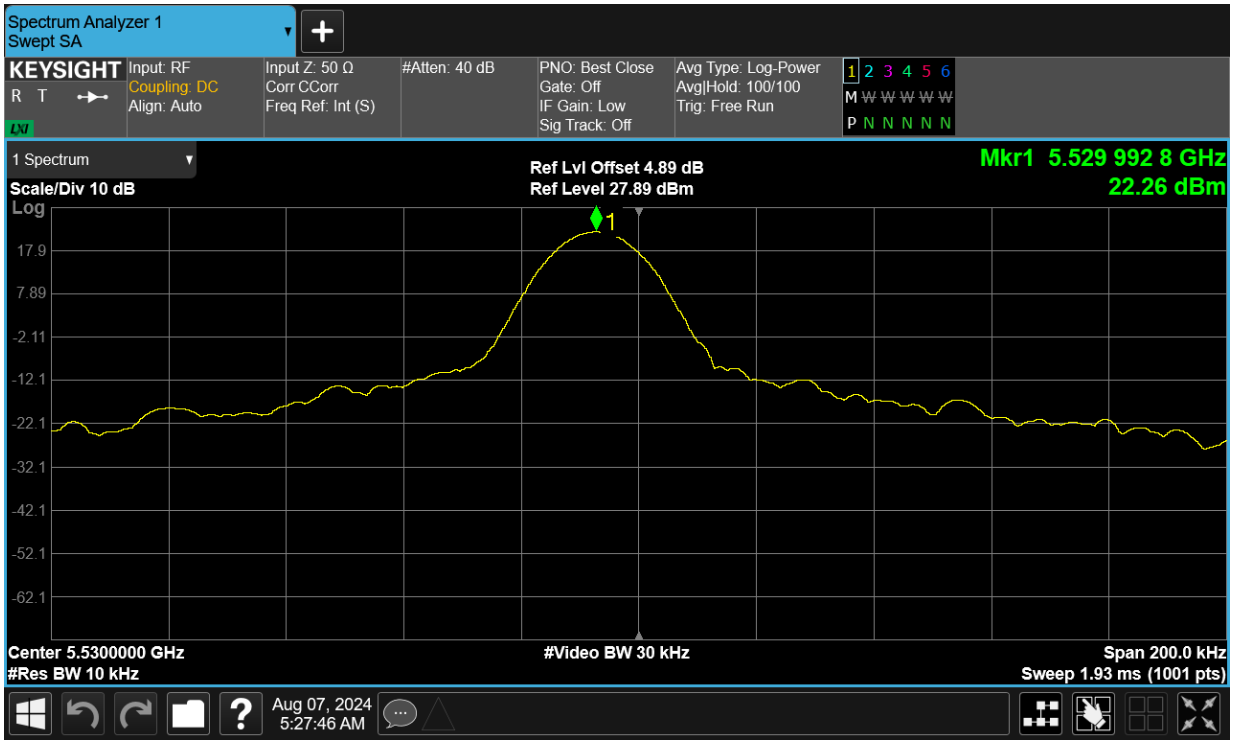
Freq. Stability LVNT ac80 5530MHz Ant1



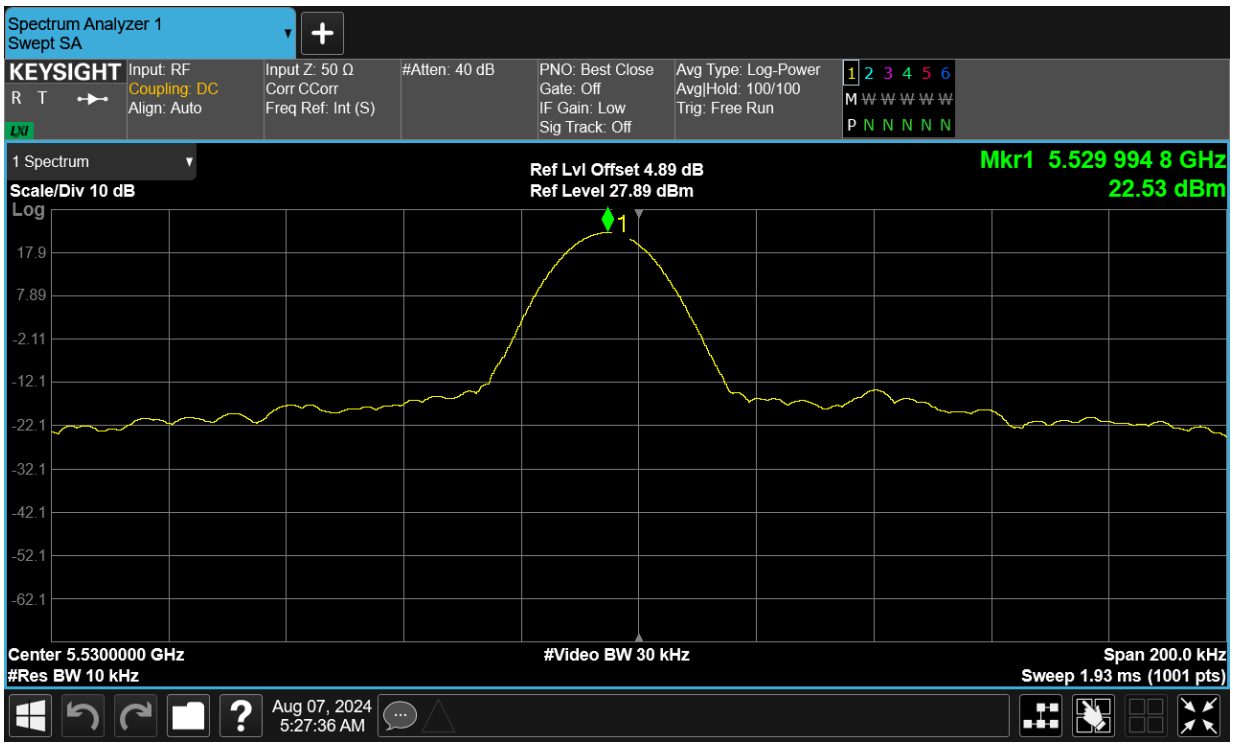
Freq. Stability NVHT ac80 5530MHz Ant1



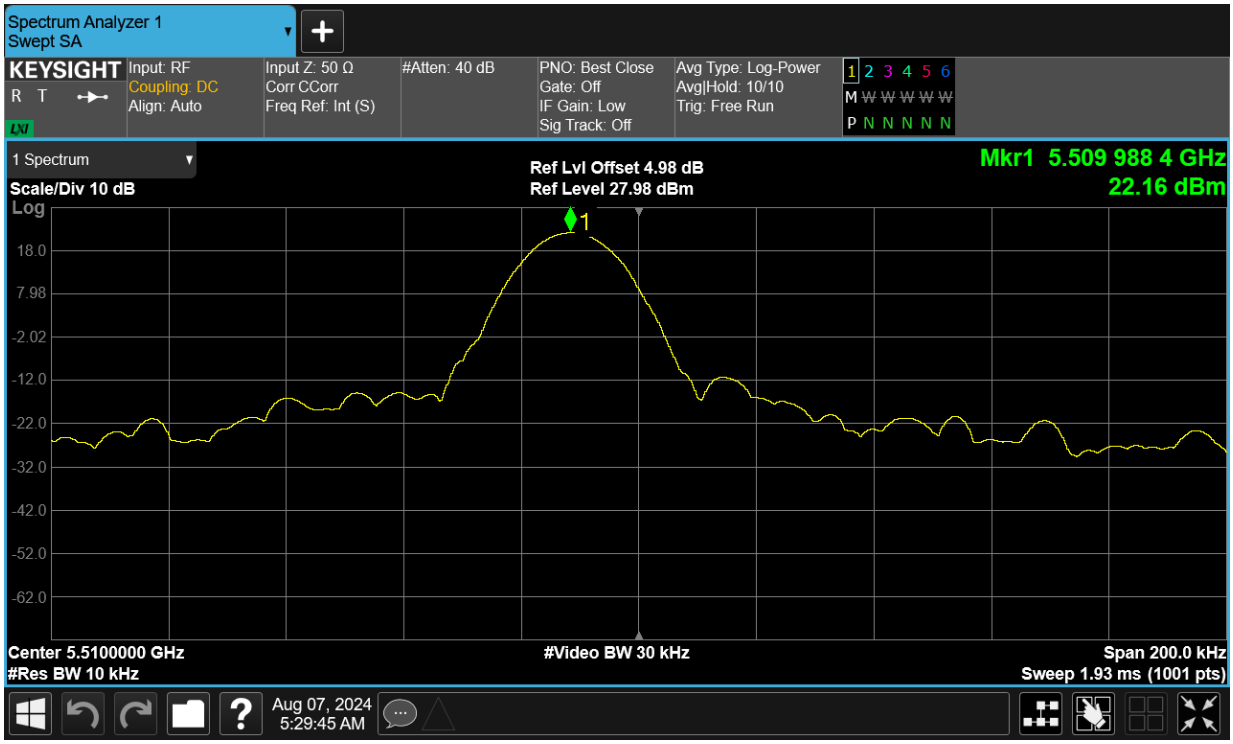
Freq. Stability NVLT ac80 5530MHz Ant1



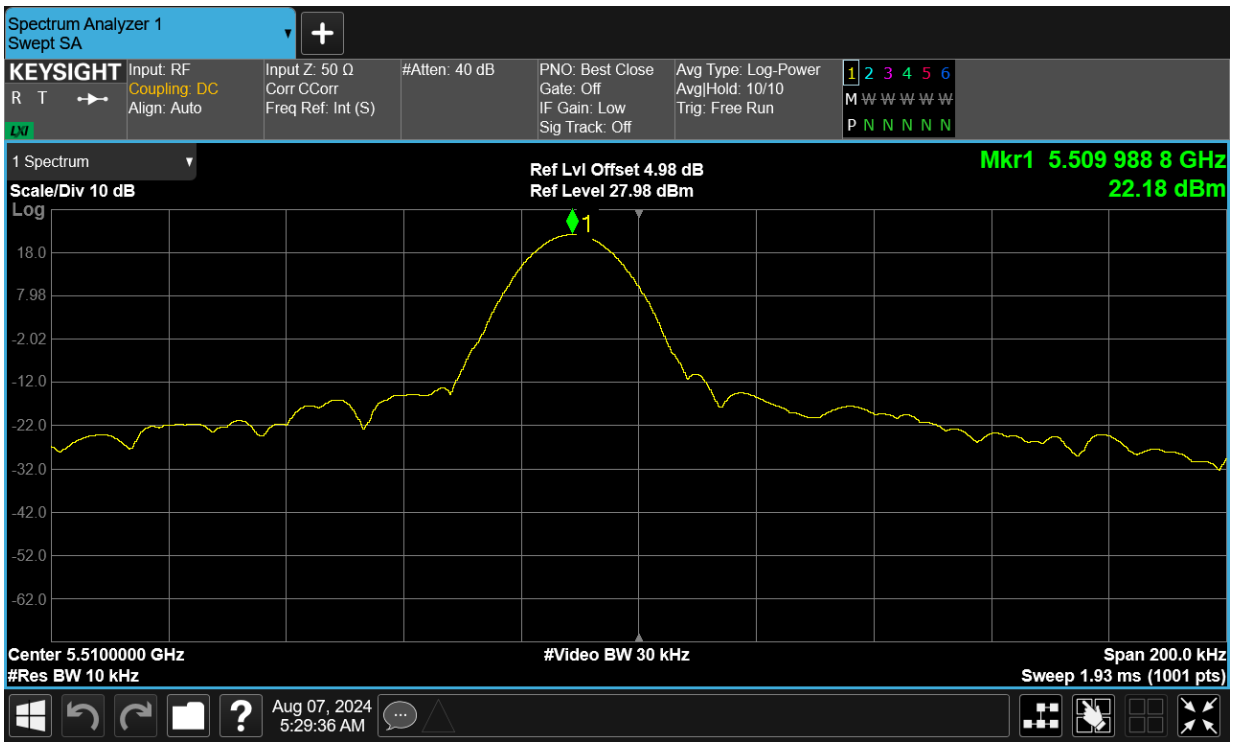
Freq. Stability NVNT ac80 5530MHz Ant1



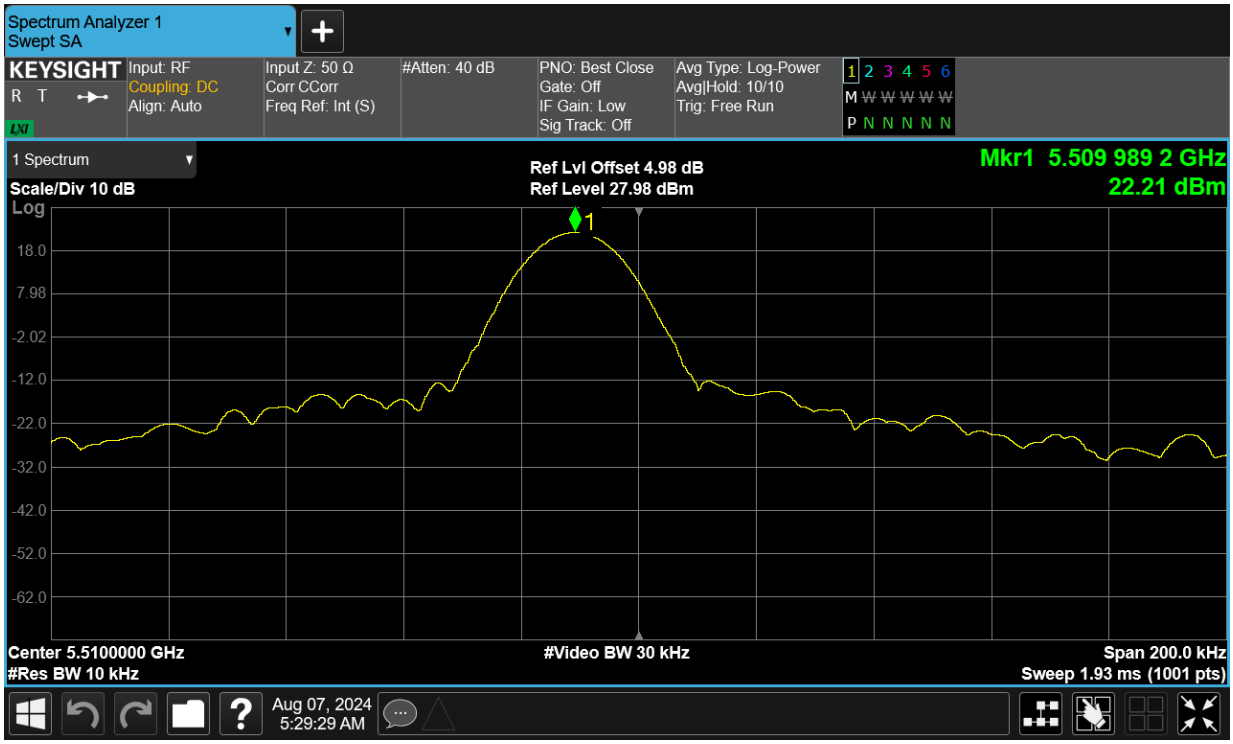
Freq. Stability LVLT n40 5510MHz Ant1



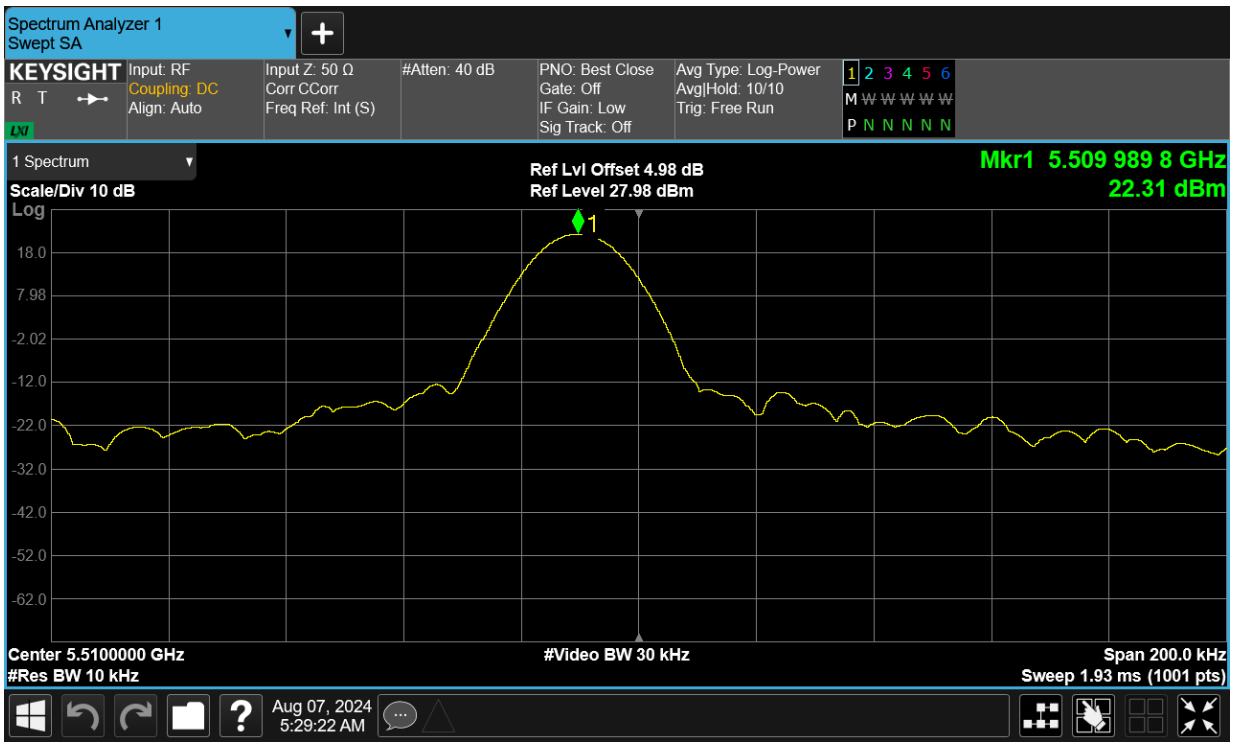
Freq. Stability LVNT n40 5510MHz Ant1



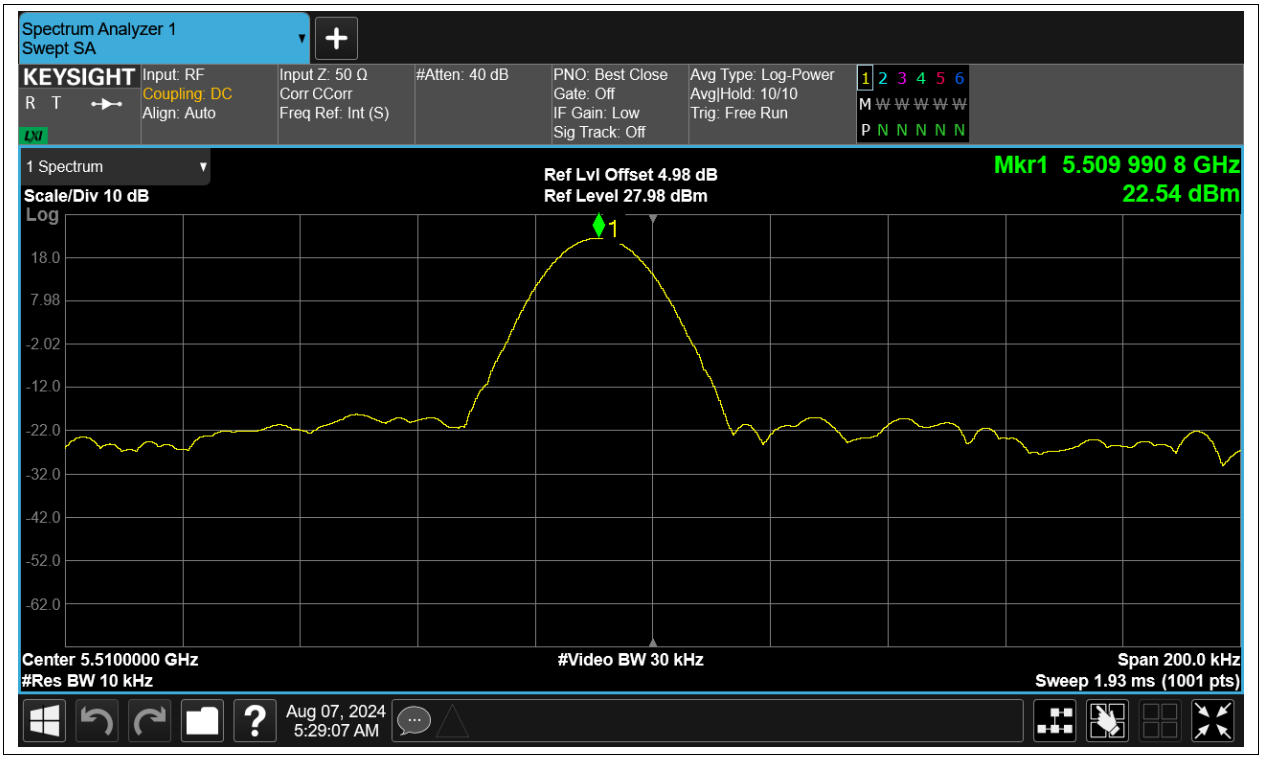
Freq. Stability NVHT n40 5510MHz Ant1



Freq. Stability NVLT n40 5510MHz Ant1



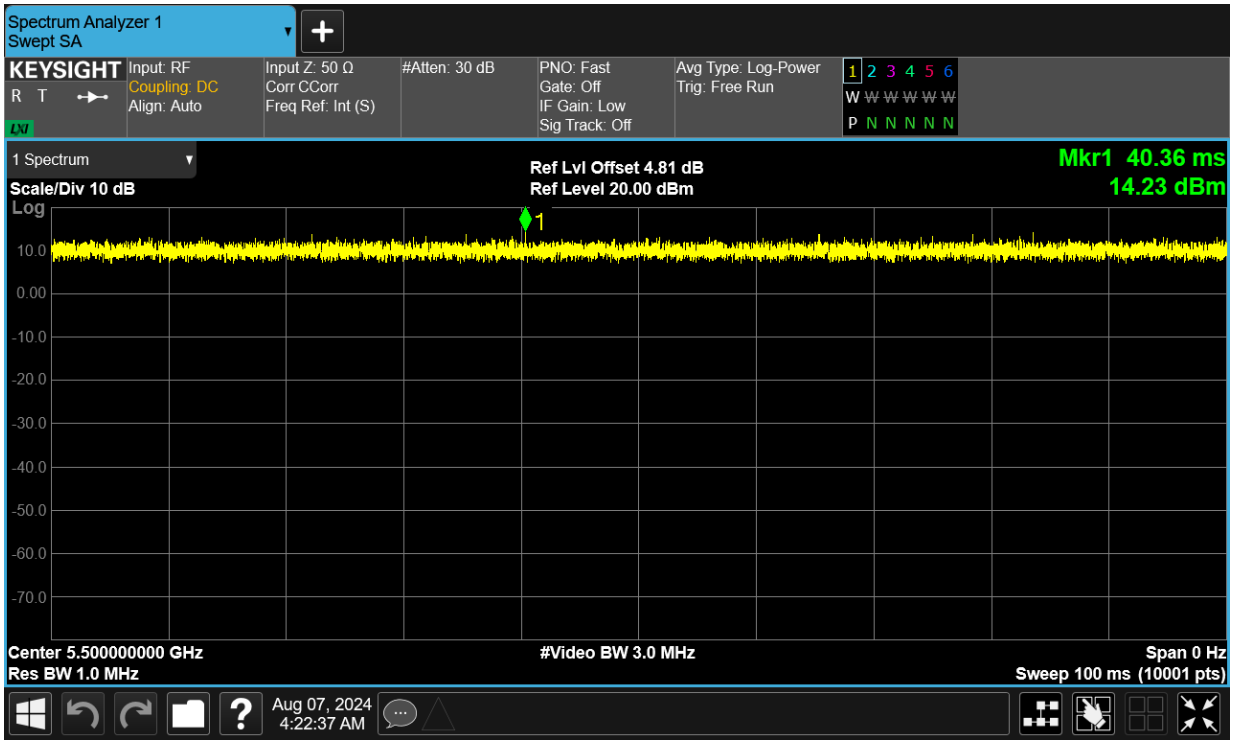
Freq. Stability NVNT n40 5510MHz Ant1


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Close
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 4.98 dB
Ref Level 27.98 dBm
Mkr1 5.509 990 8 GHz
22.54 dBm
Log
18.0
7.98
-2.02
-12.0
-22.0
-32.0
-42.0
-52.0
-62.0
Center 5.5100000 GHz
#Res BW 10 kHz
#Video BW 30 kHz
Span 200.0 kHz
Sweep 1.93 ms (1001 pts)
Aug 07, 2024
5:29:07 AM

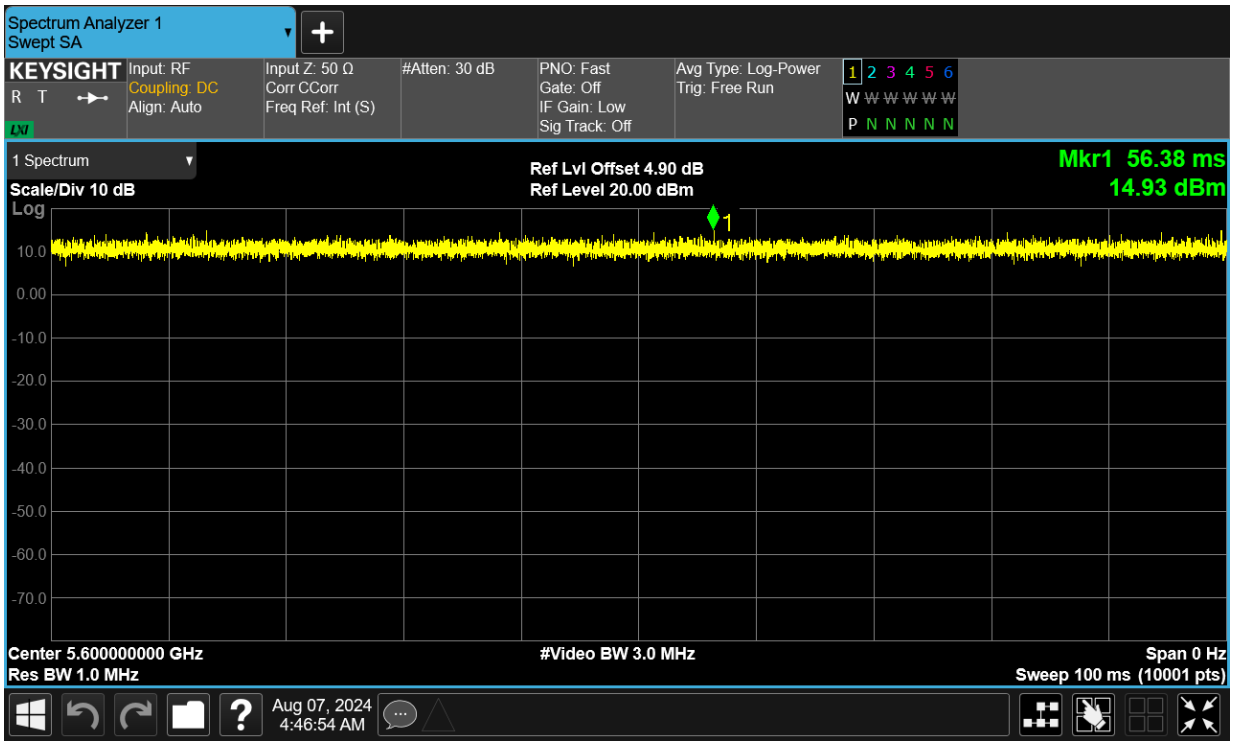
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant1	100	0
NVNT	a	5600	Ant1	100	0
NVNT	a	5700	Ant1	100	0
NVNT	ac20	5500	Ant1	100	0
NVNT	ac20	5600	Ant1	100	0
NVNT	ac20	5700	Ant1	100	0
NVNT	ac40	5510	Ant1	100	0
NVNT	ac40	5590	Ant1	100	0
NVNT	ac40	5670	Ant1	100	0
NVNT	ac80	5530	Ant1	100	0
NVNT	ac80	5610	Ant1	100	0
NVNT	n20	5500	Ant1	100	0
NVNT	n20	5600	Ant1	100	0
NVNT	n20	5700	Ant1	100	0
NVNT	n40	5510	Ant1	100	0
NVNT	n40	5590	Ant1	100	0
NVNT	n40	5670	Ant1	100	0

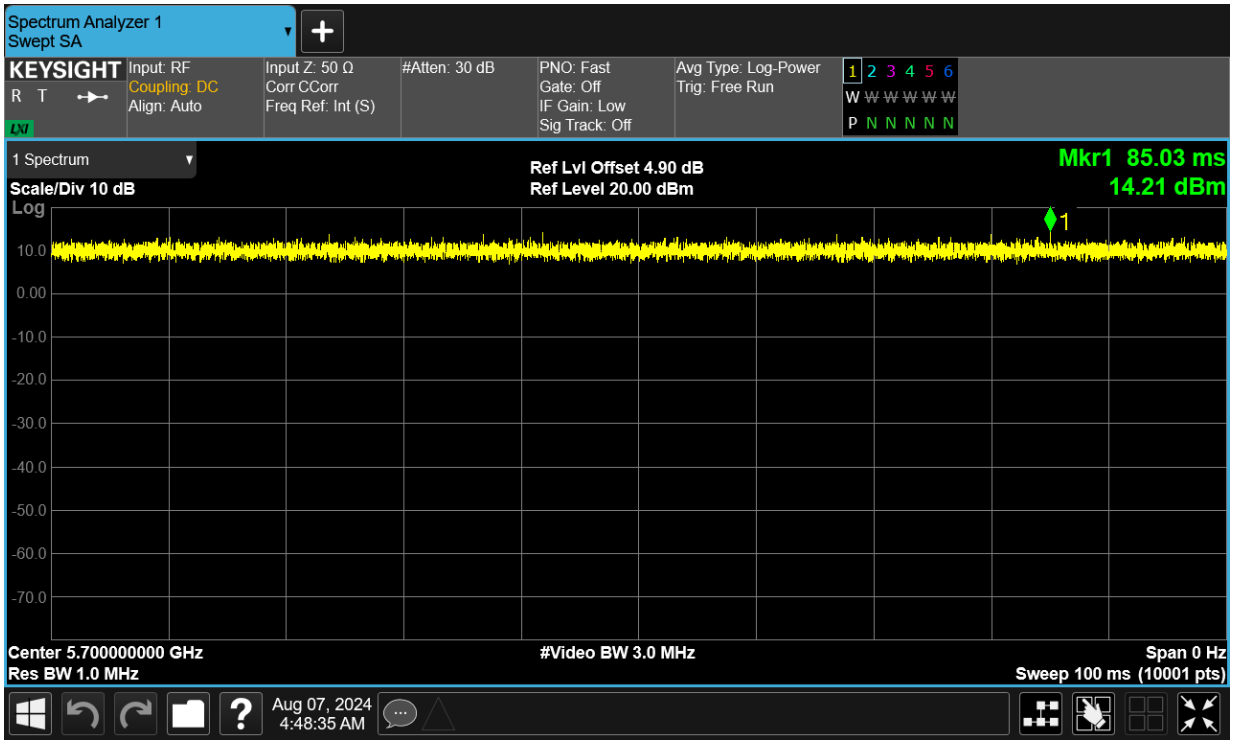
Test Graphs
Duty Cycle NVNT a 5500MHz Ant1



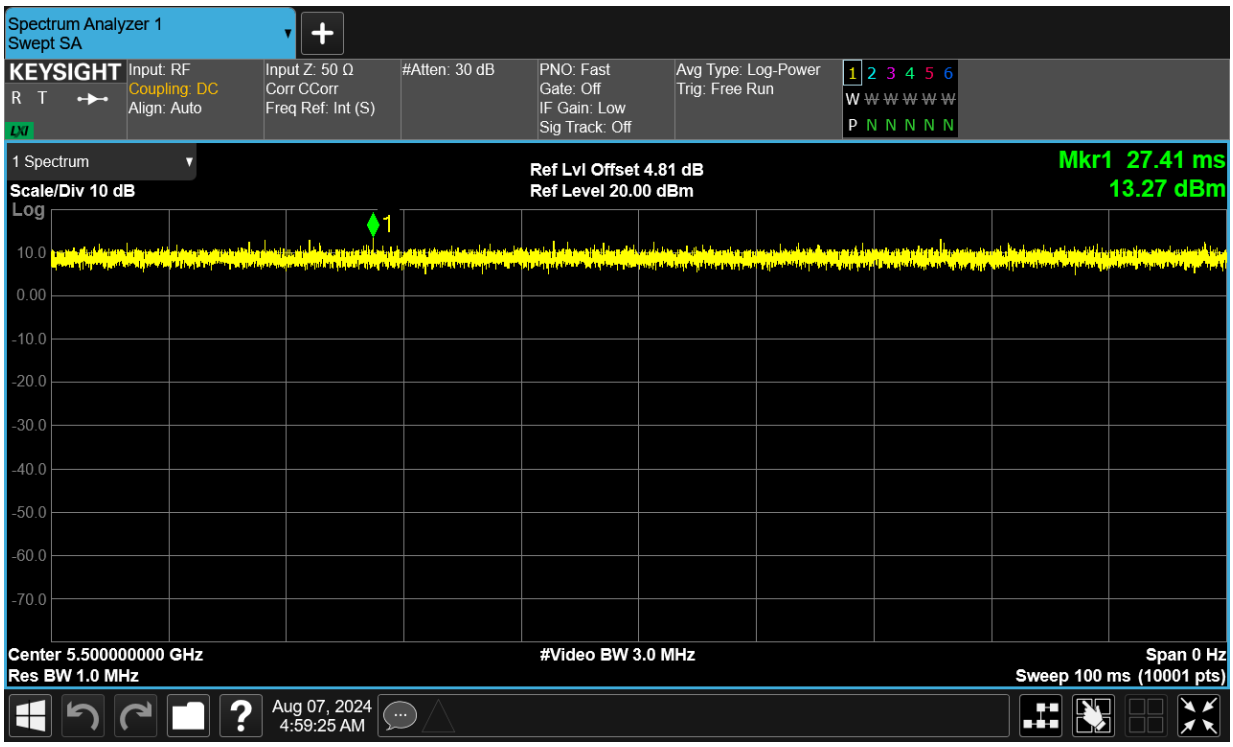
Duty Cycle NVNT a 5600MHz Ant1



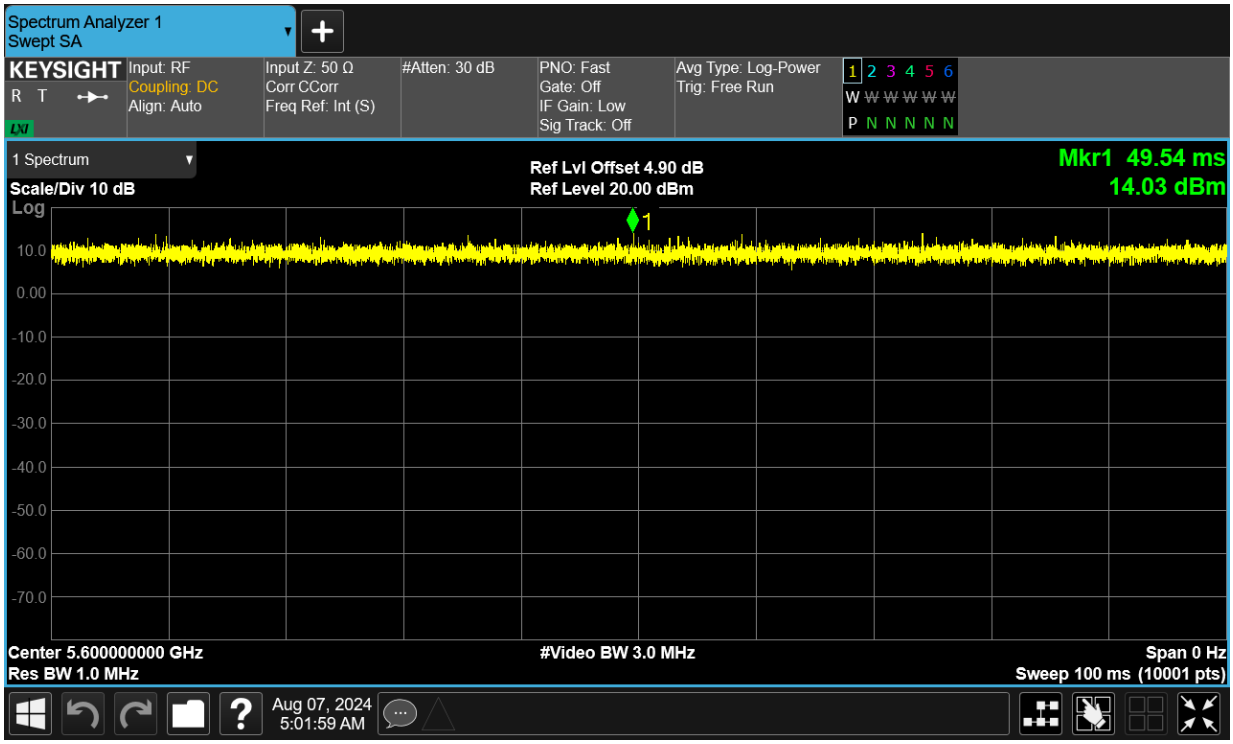
Duty Cycle NVNT a 5700MHz Ant1



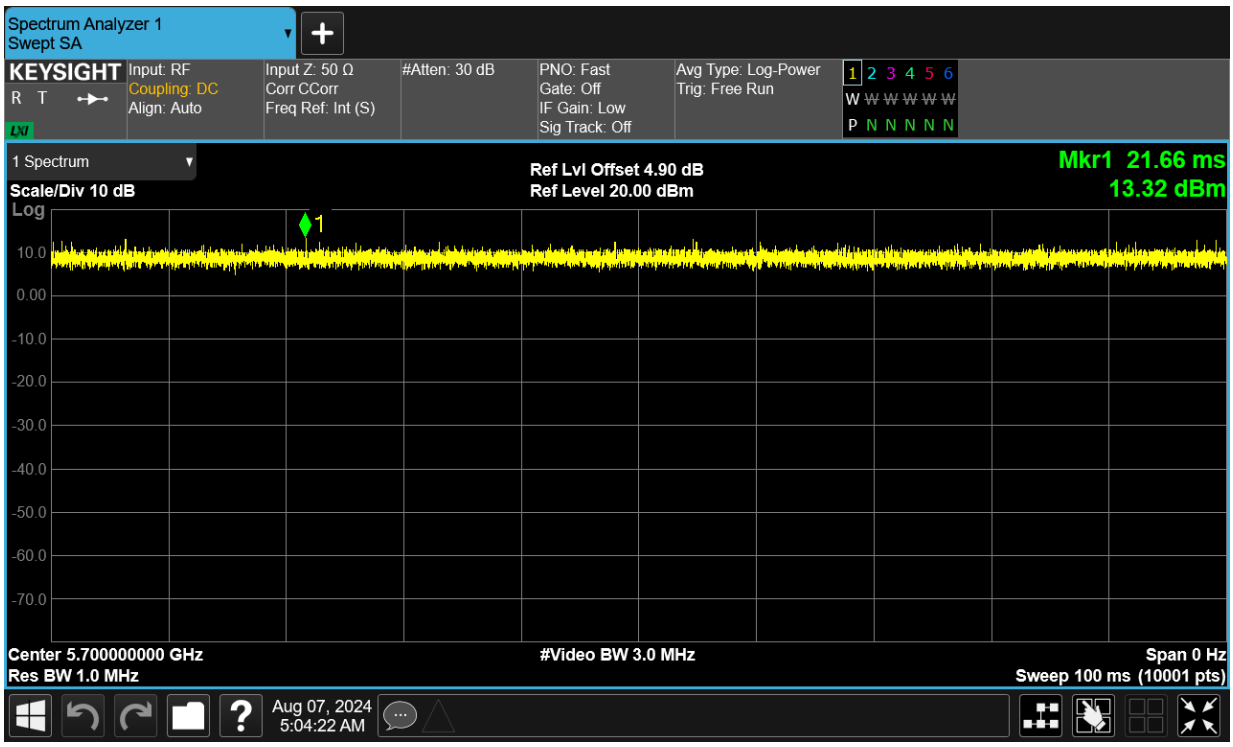
Duty Cycle NVNT ac20 5500MHz Ant1



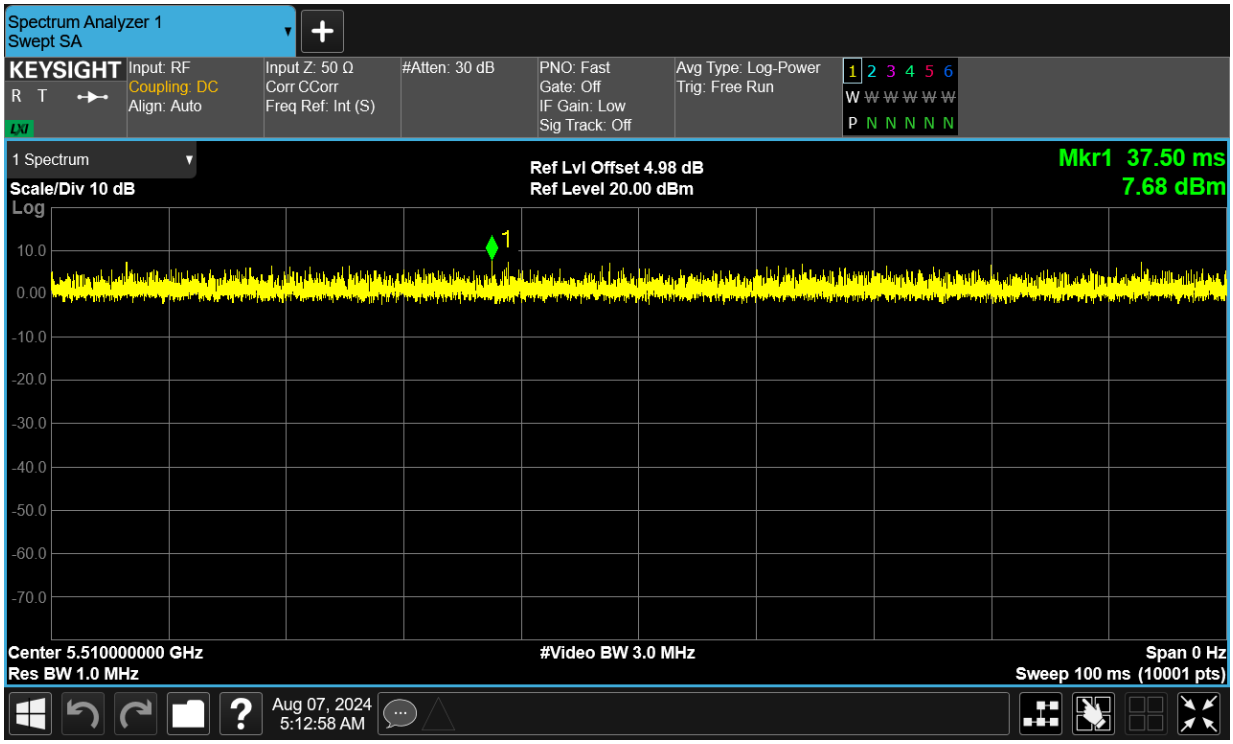
Duty Cycle NVNT ac20 5600MHz Ant1



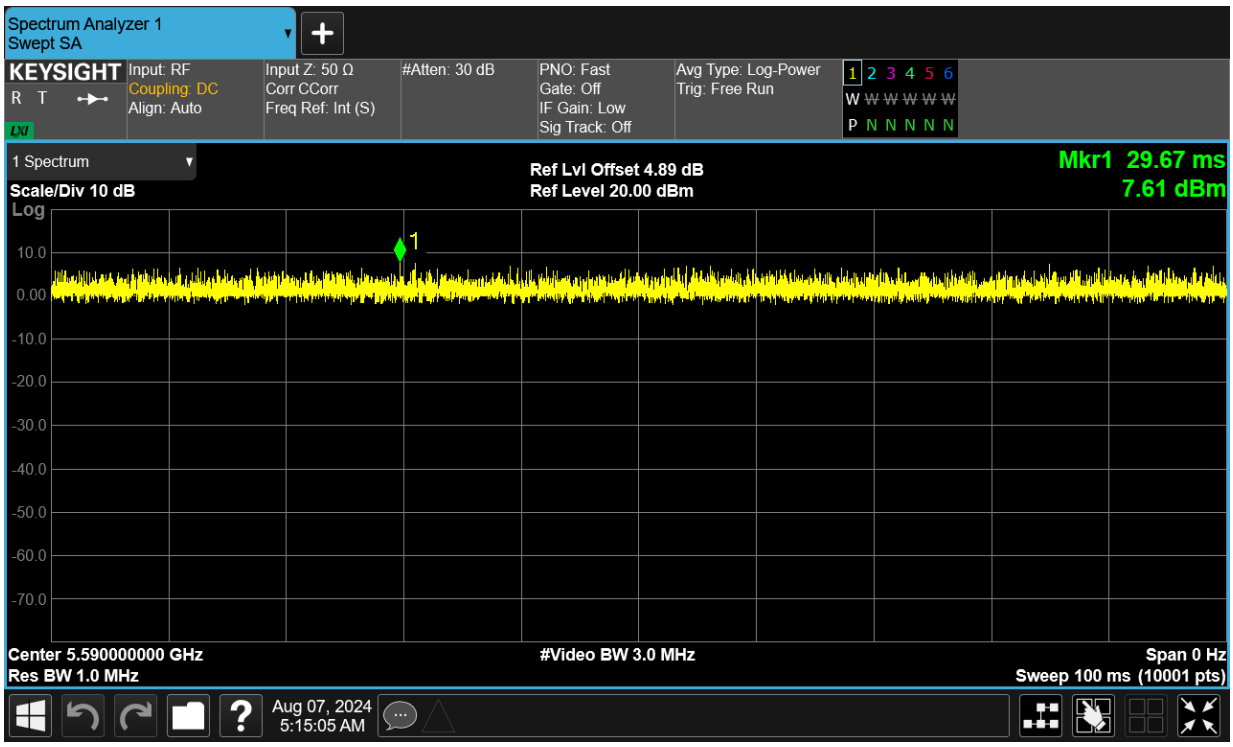
Duty Cycle NVNT ac20 5700MHz Ant1



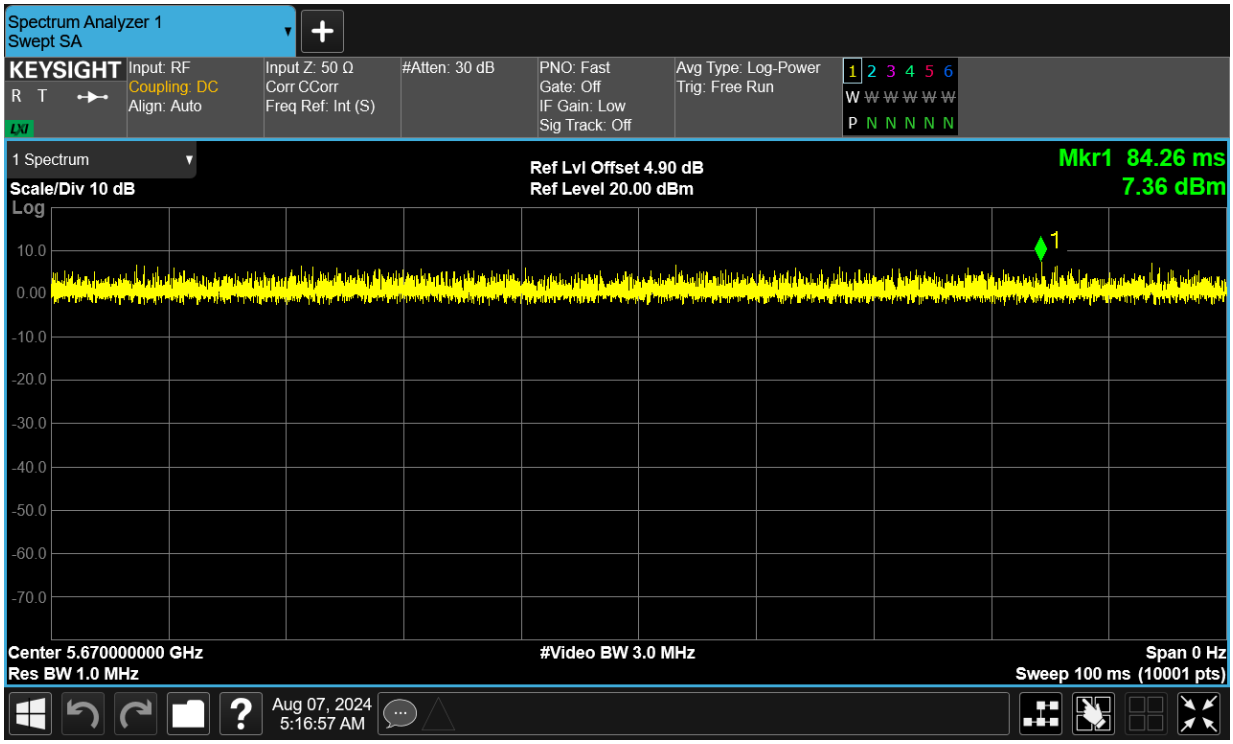
Duty Cycle NVNT ac40 5510MHz Ant1



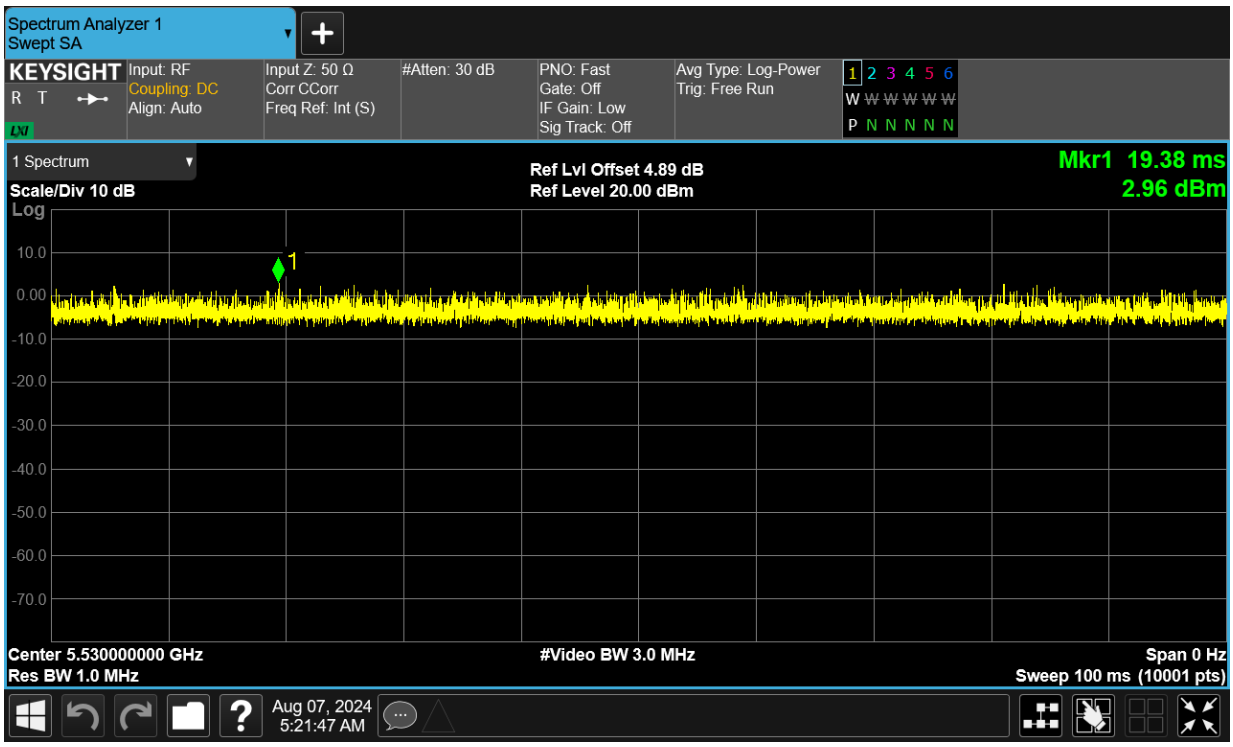
Duty Cycle NVNT ac40 5590MHz Ant1



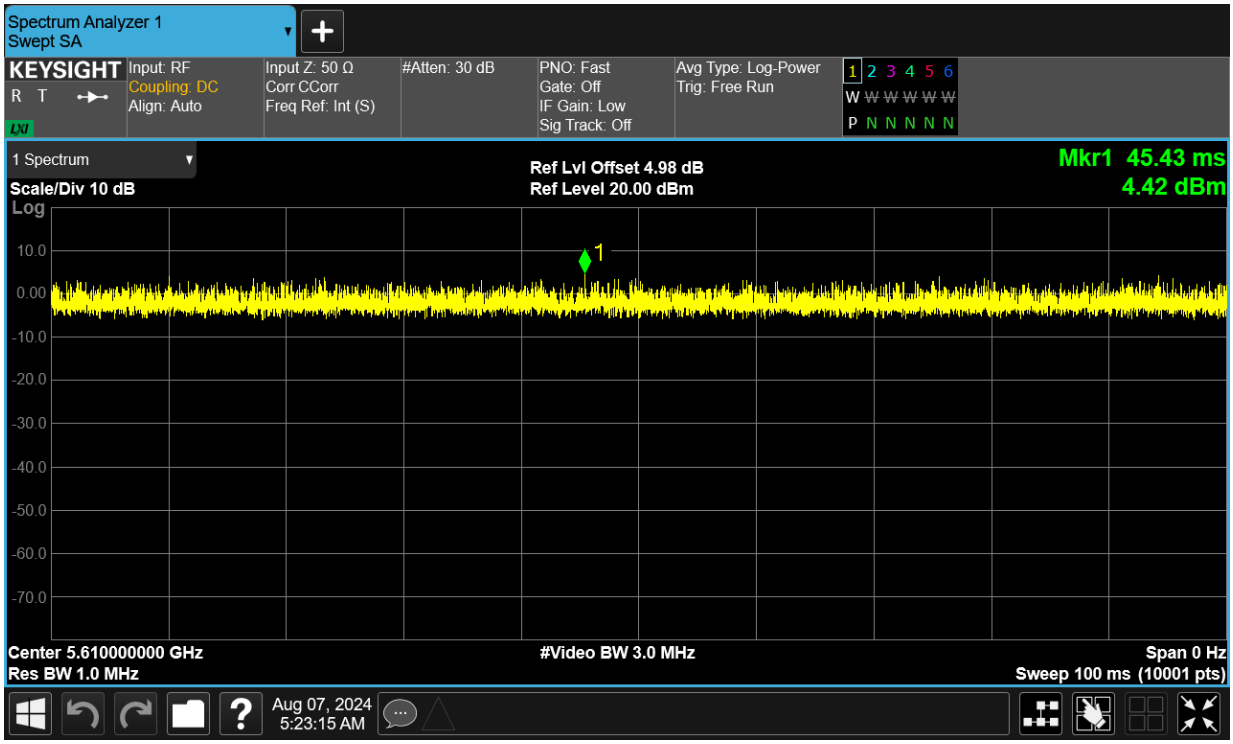
Duty Cycle NVNT ac40 5670MHz Ant1



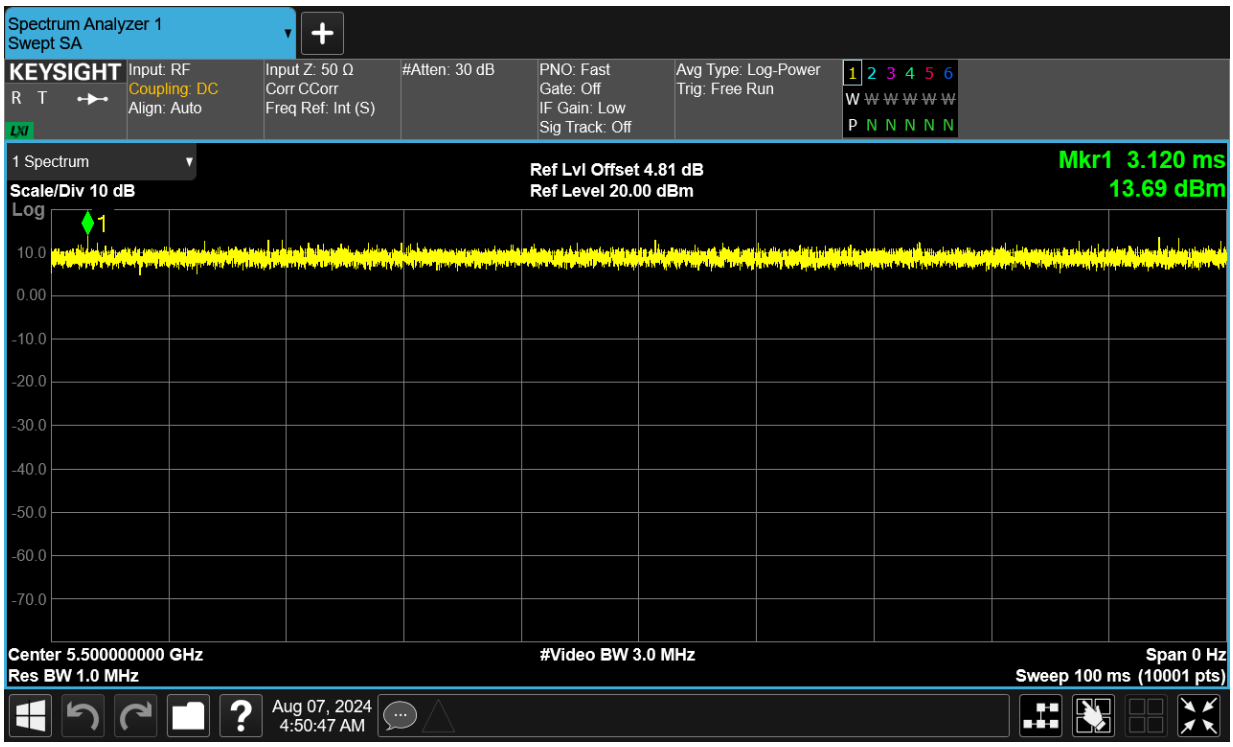
Duty Cycle NVNT ac80 5530MHz Ant1



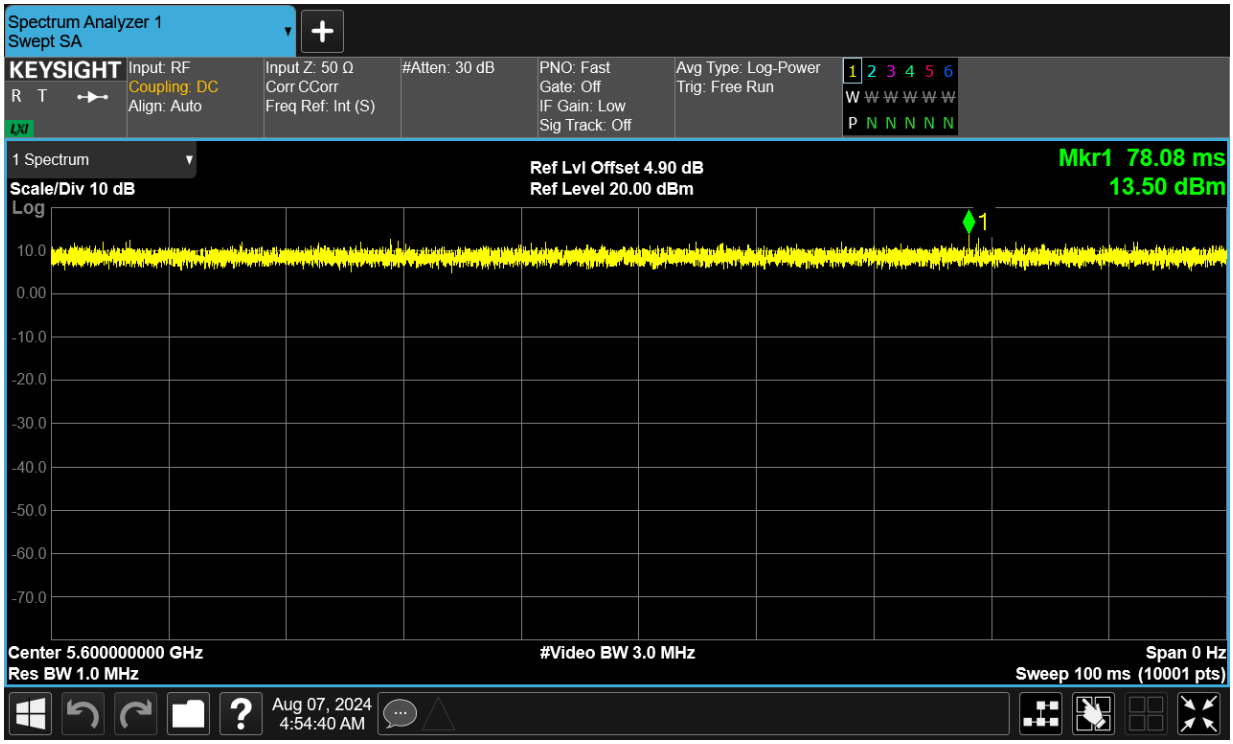
Duty Cycle NVNT ac80 5610MHz Ant1



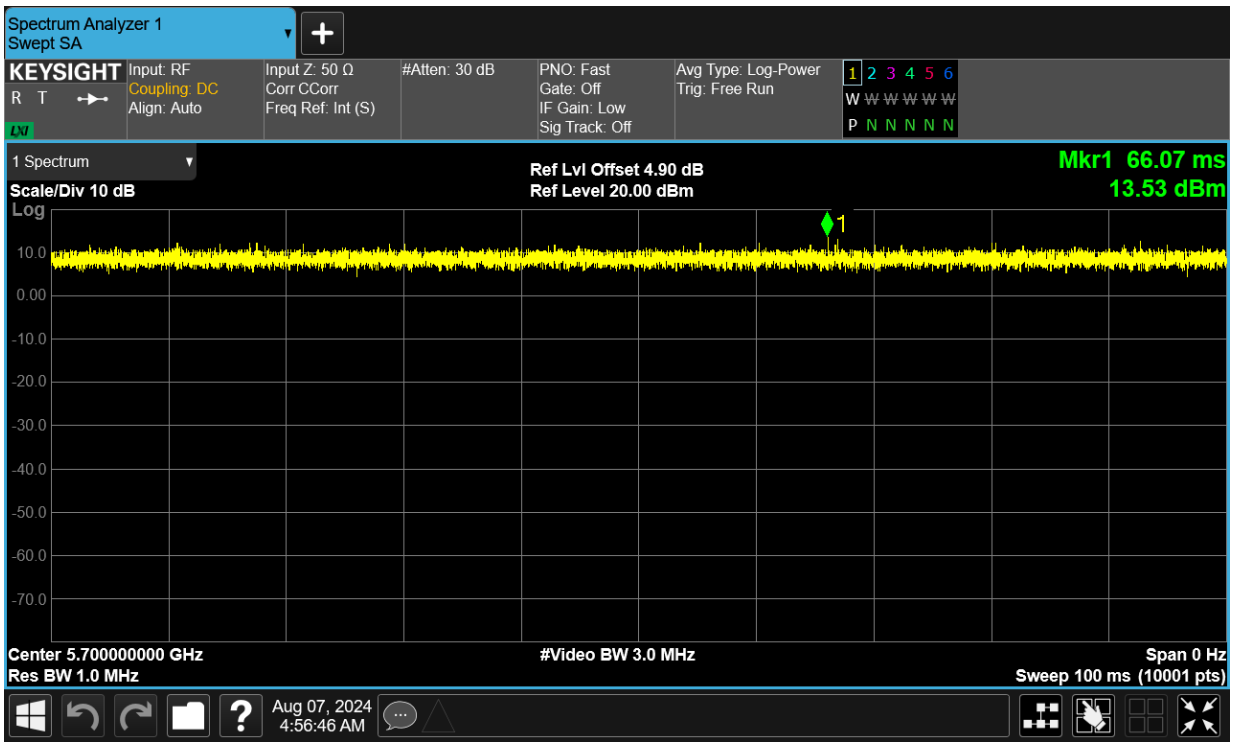
Duty Cycle NVNT n20 5500MHz Ant1



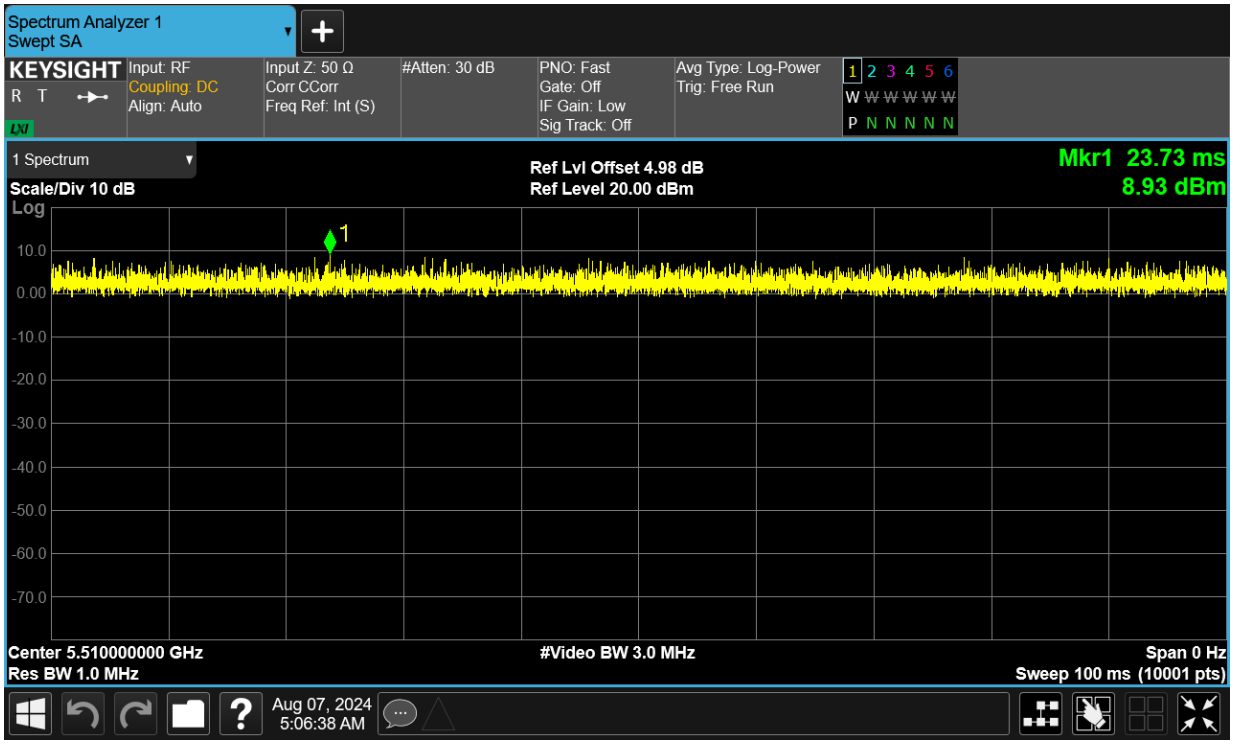
Duty Cycle NVNT n20 5600MHz Ant1



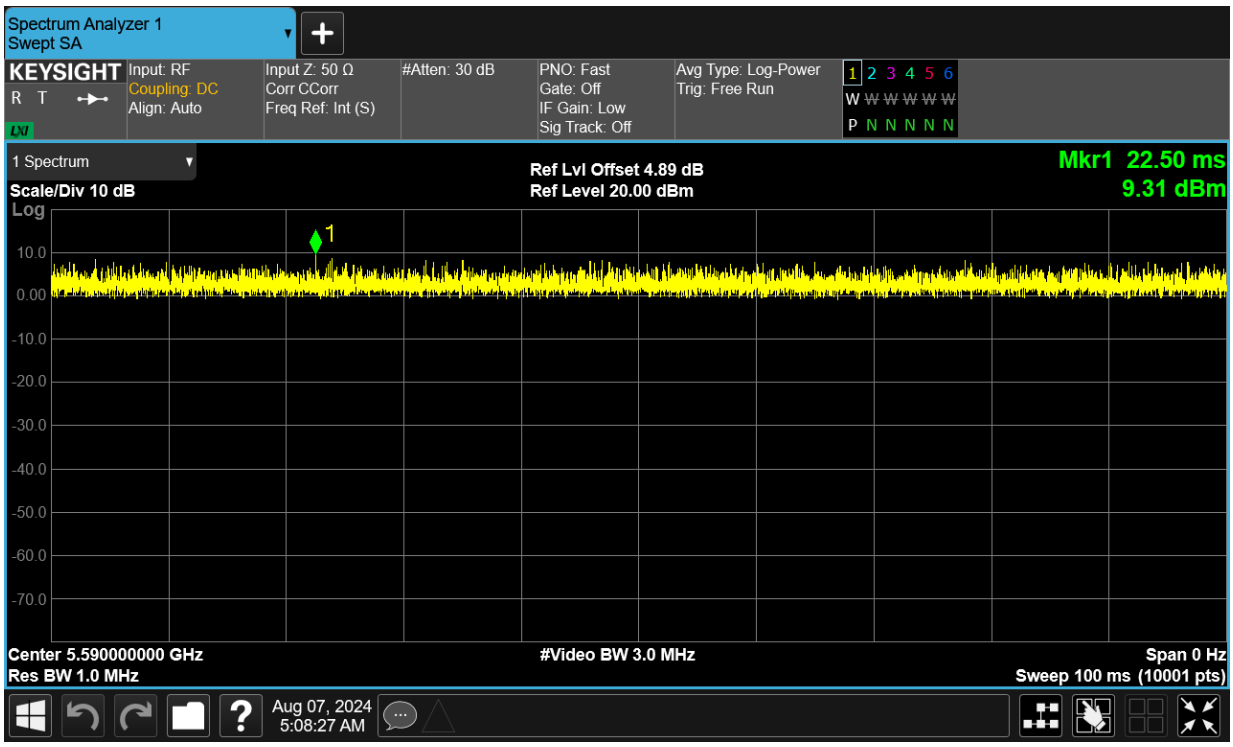
Duty Cycle NVNT n20 5700MHz Ant1



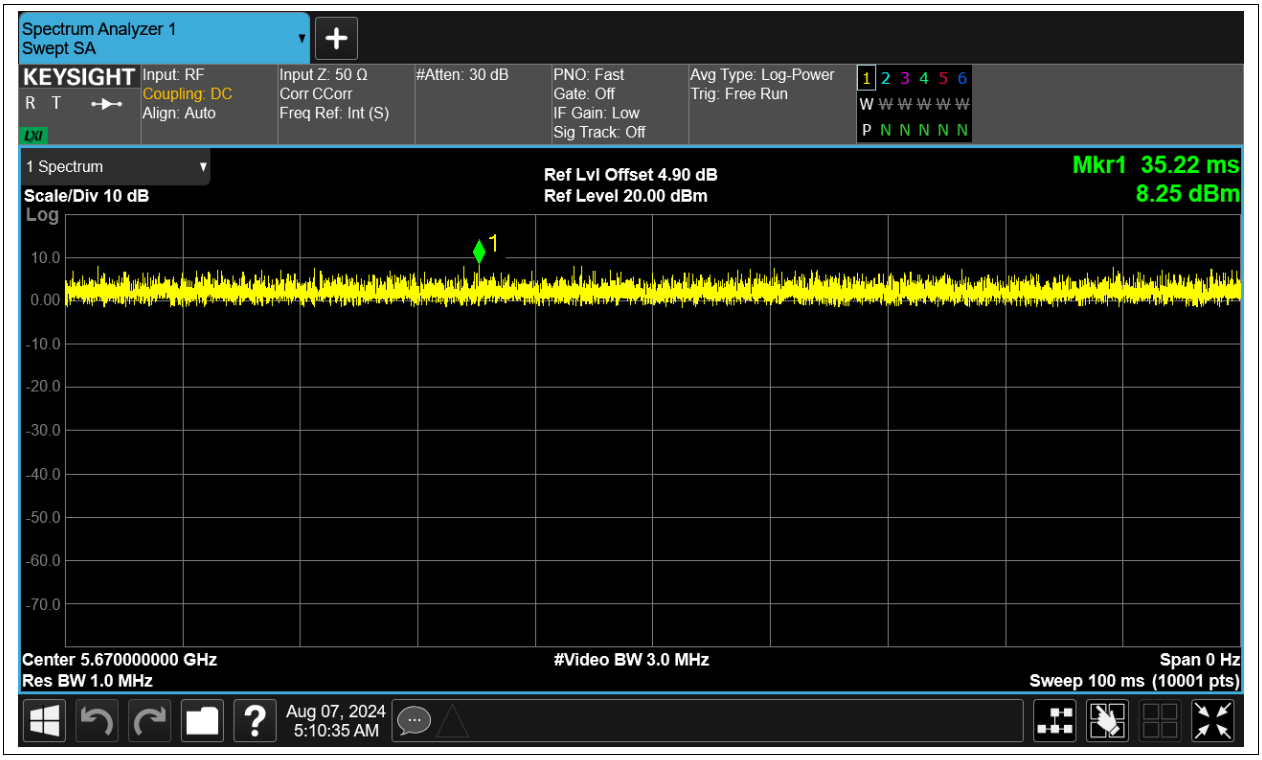
Duty Cycle NVNT n40 5510MHz Ant1



Duty Cycle NVNT n40 5590MHz Ant1



Duty Cycle NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 35.22 ms
8.25 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.670000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 100 ms (10001 pts)
Aug 07, 2024
5:10:35 AM

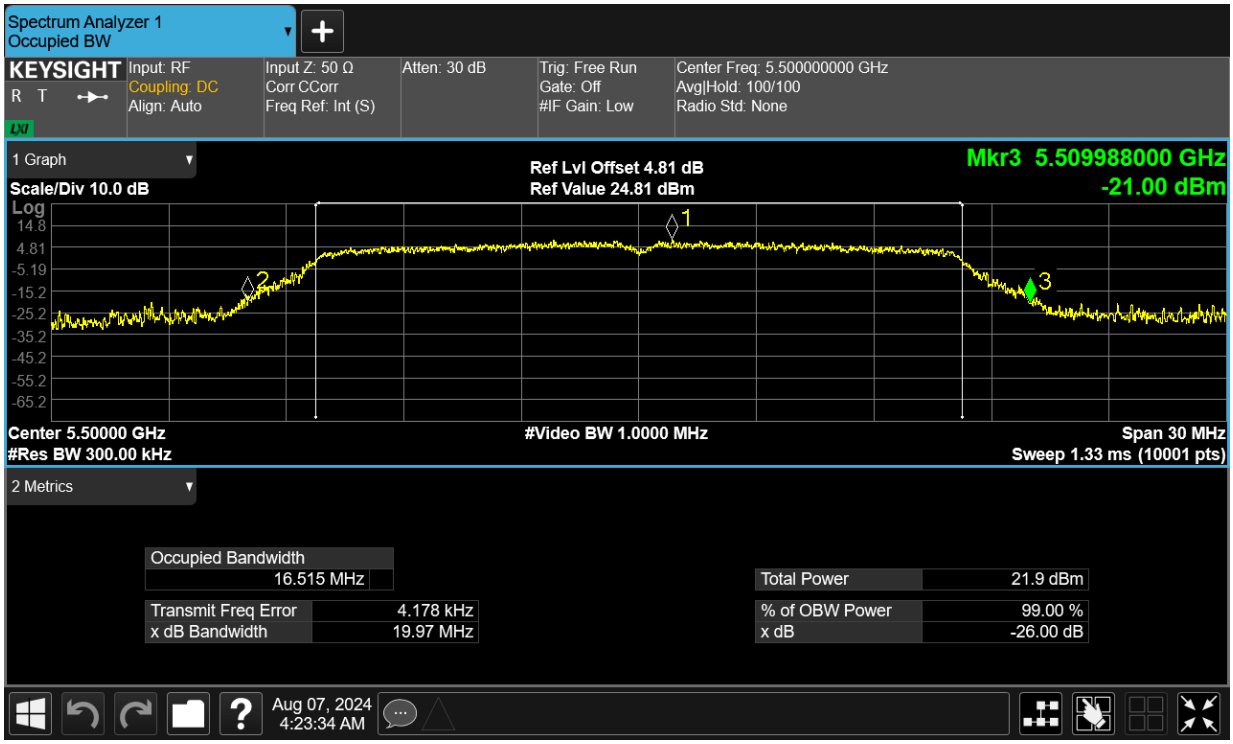
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	12.21	0	12.21	24	Pass
NVNT	a	5600	Ant1	12.98	0	12.98	24	Pass
NVNT	a	5700	Ant1	12.05	0	12.05	24	Pass
NVNT	ac20	5500	Ant1	12.15	0	12.15	24	Pass
NVNT	ac20	5600	Ant1	12.94	0	12.94	24	Pass
NVNT	ac20	5700	Ant1	11.9	0	11.9	24	Pass
NVNT	ac40	5510	Ant1	8.52	0	8.52	24	Pass
NVNT	ac40	5590	Ant1	9	0	9	24	Pass
NVNT	ac40	5670	Ant1	9.09	0	9.09	24	Pass
NVNT	ac80	5530	Ant1	9.74	0	9.74	24	Pass
NVNT	ac80	5610	Ant1	9.6	0	9.6	24	Pass
NVNT	n20	5500	Ant1	12.27	0	12.27	24	Pass
NVNT	n20	5600	Ant1	12.95	0	12.95	24	Pass
NVNT	n20	5700	Ant1	12.01	0	12.01	24	Pass
NVNT	n40	5510	Ant1	8.73	0	8.73	24	Pass
NVNT	n40	5590	Ant1	9.44	0	9.44	24	Pass
NVNT	n40	5670	Ant1	8.76	0	8.76	24	Pass

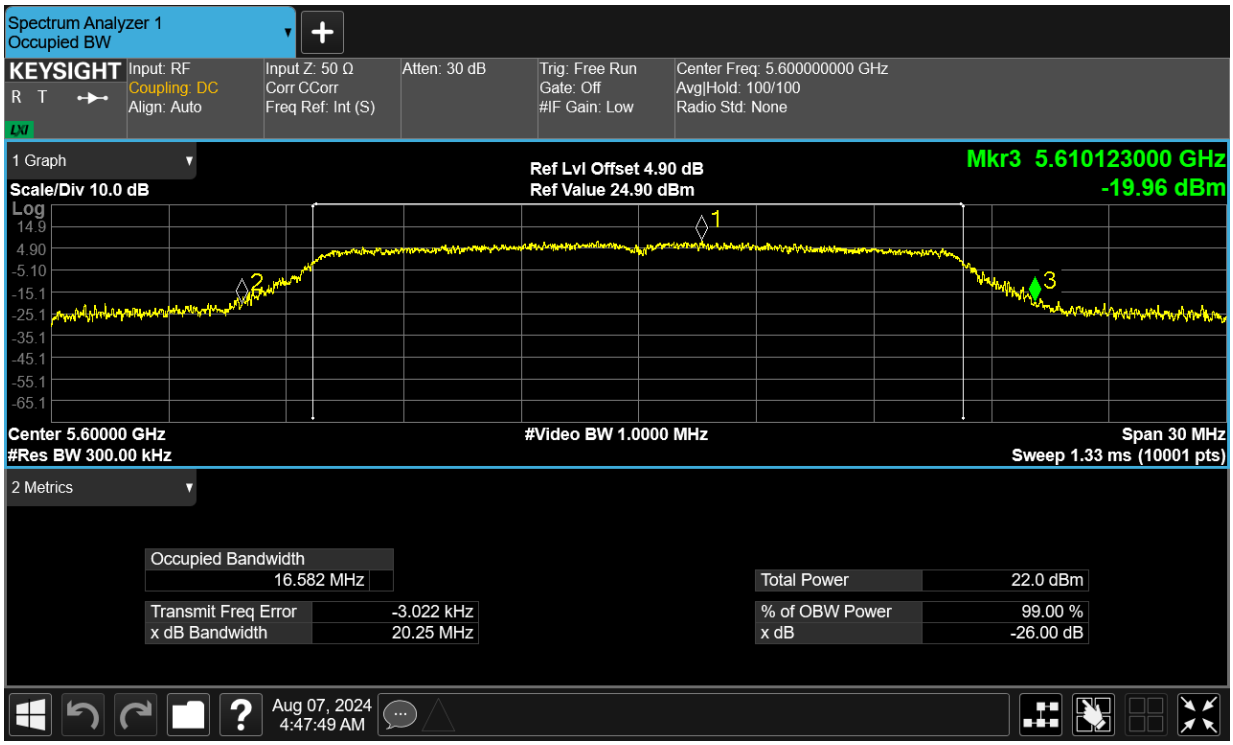
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5500	Ant1	19.968
NVNT	a	5600	Ant1	20.252
NVNT	a	5700	Ant1	20.077
NVNT	ac20	5500	Ant1	20.543
NVNT	ac20	5600	Ant1	20.332
NVNT	ac20	5700	Ant1	20.364
NVNT	ac40	5510	Ant1	39.567
NVNT	ac40	5590	Ant1	40.431
NVNT	ac40	5670	Ant1	40.175
NVNT	ac80	5530	Ant1	78.823
NVNT	ac80	5610	Ant1	78.898
NVNT	n20	5500	Ant1	20.475
NVNT	n20	5600	Ant1	20.178
NVNT	n20	5700	Ant1	20.48
NVNT	n40	5510	Ant1	39.697
NVNT	n40	5590	Ant1	39.616
NVNT	n40	5670	Ant1	39.807

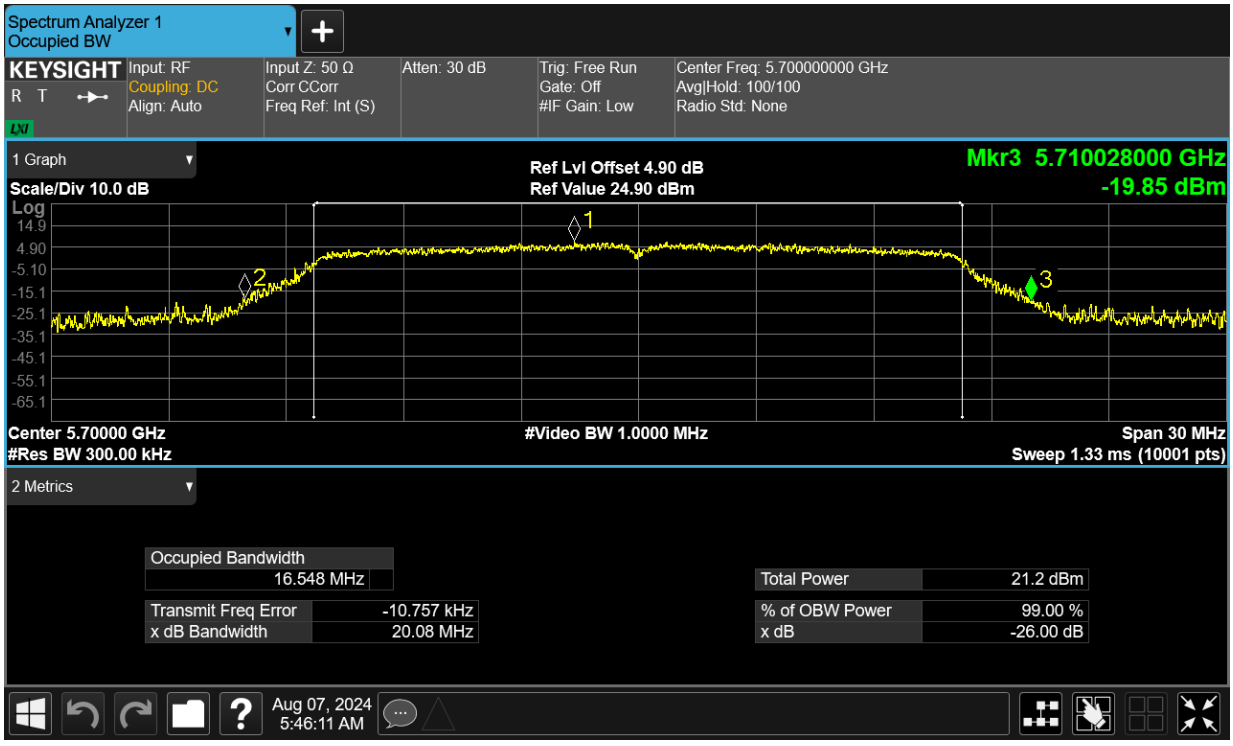
Test Graphs
-26dB Bandwidth NVNT a 5500MHz Ant1



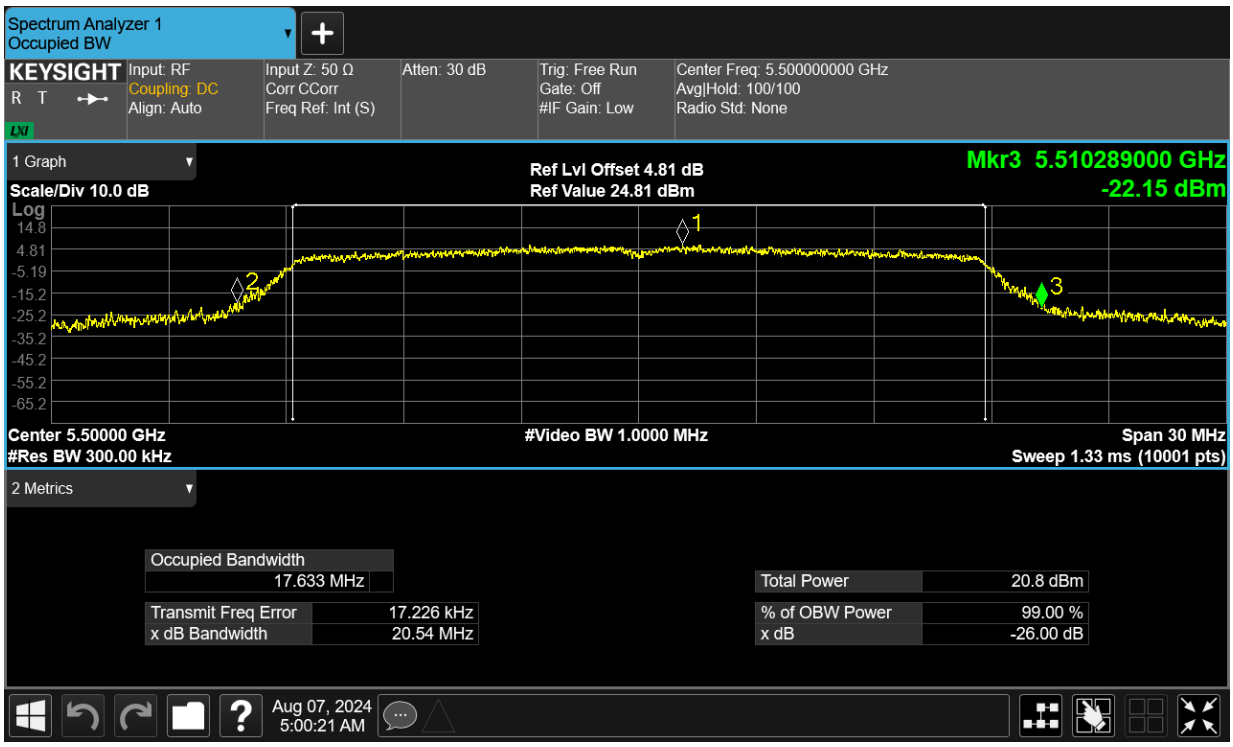
-26dB Bandwidth NVNT a 5600MHz Ant1



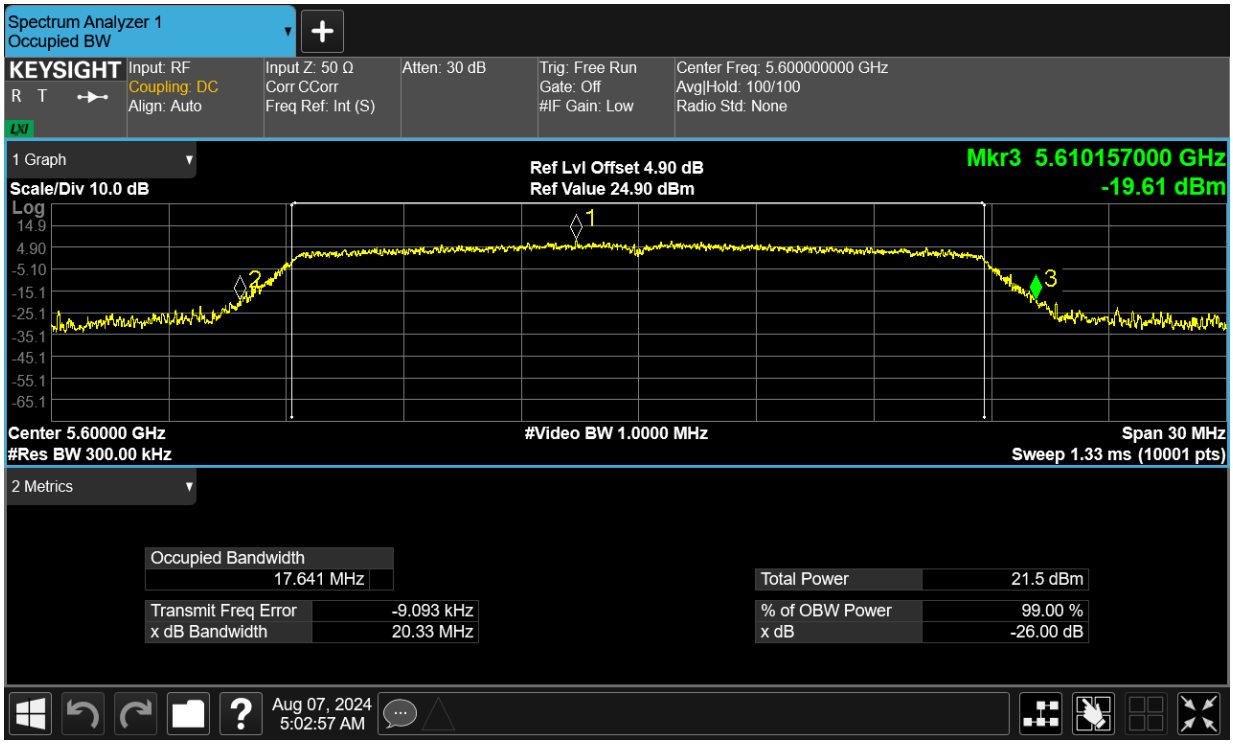
-26dB Bandwidth NVNT a 5700MHz Ant1



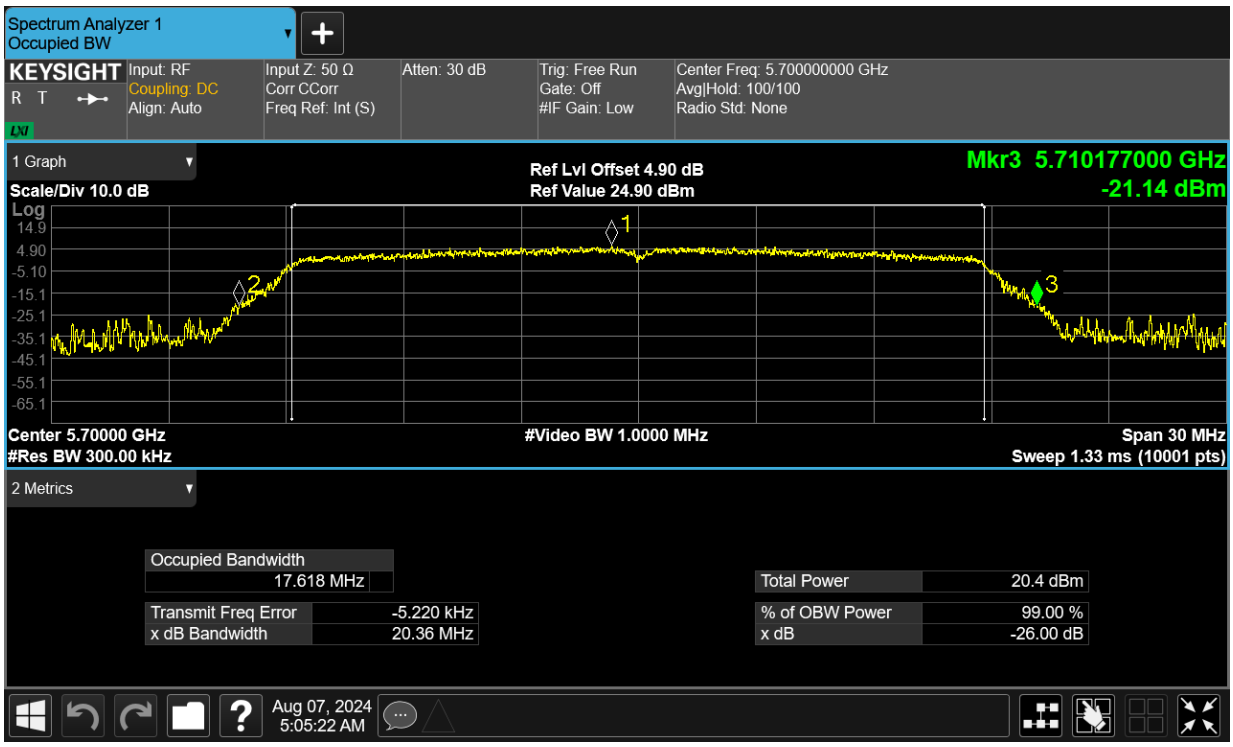
-26dB Bandwidth NVNT ac20 5500MHz Ant1



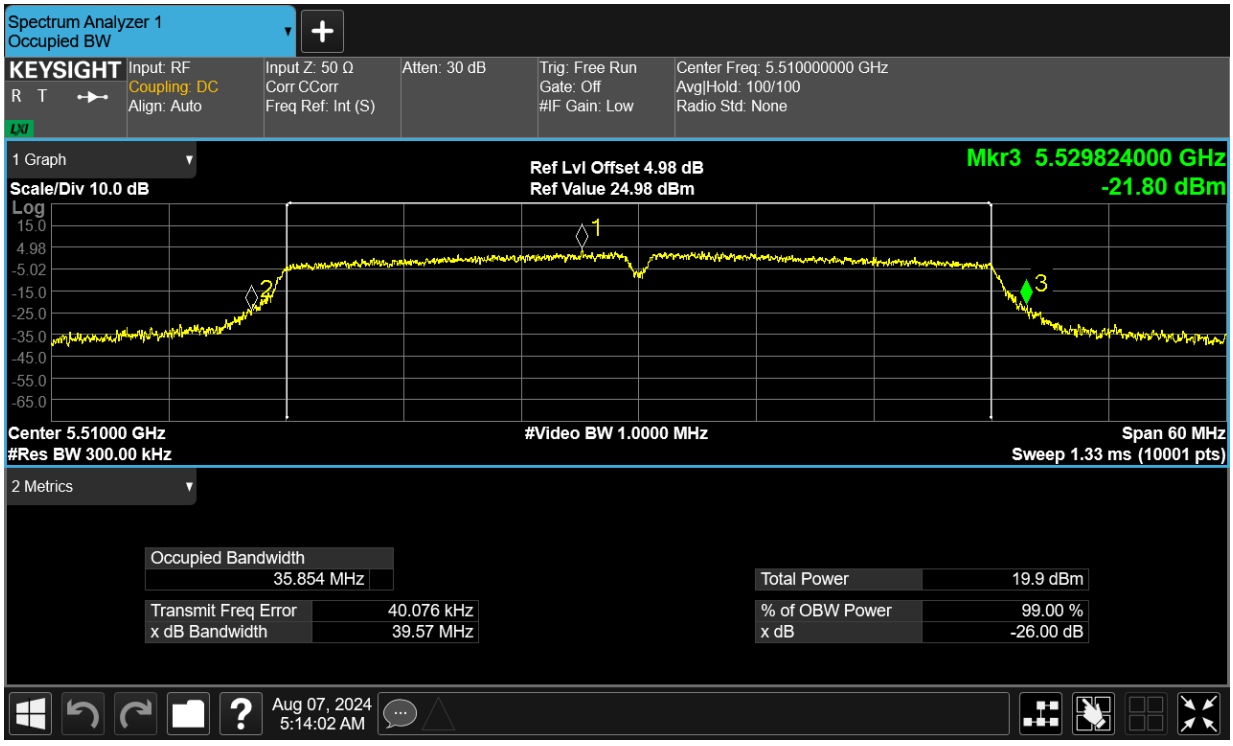
-26dB Bandwidth NVNT ac20 5600MHz Ant1



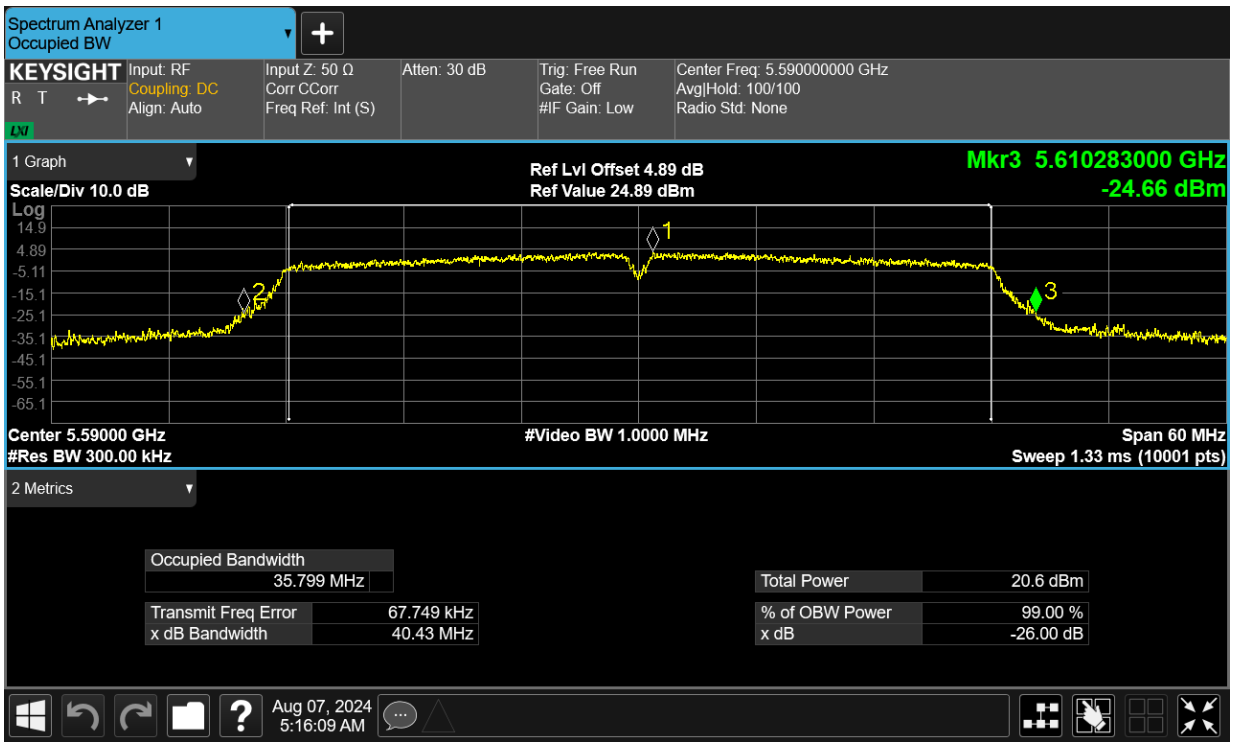
-26dB Bandwidth NVNT ac20 5700MHz Ant1



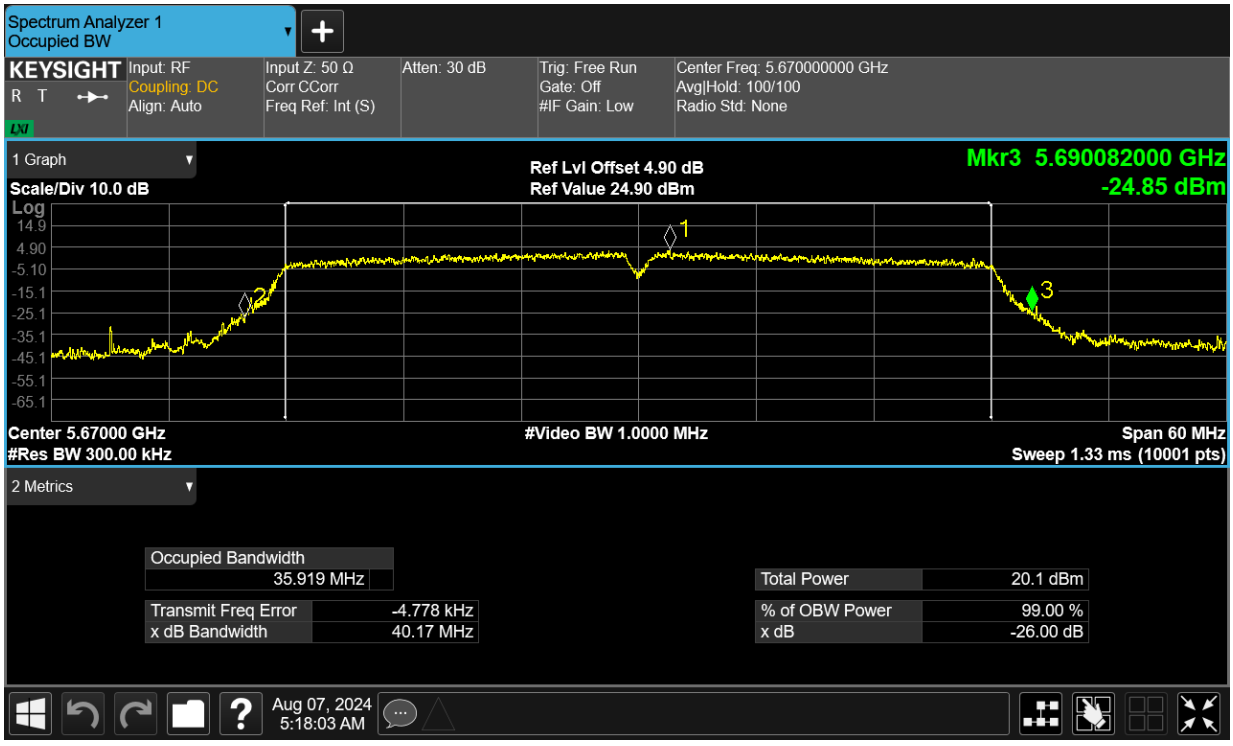
-26dB Bandwidth NVNT ac40 5510MHz Ant1



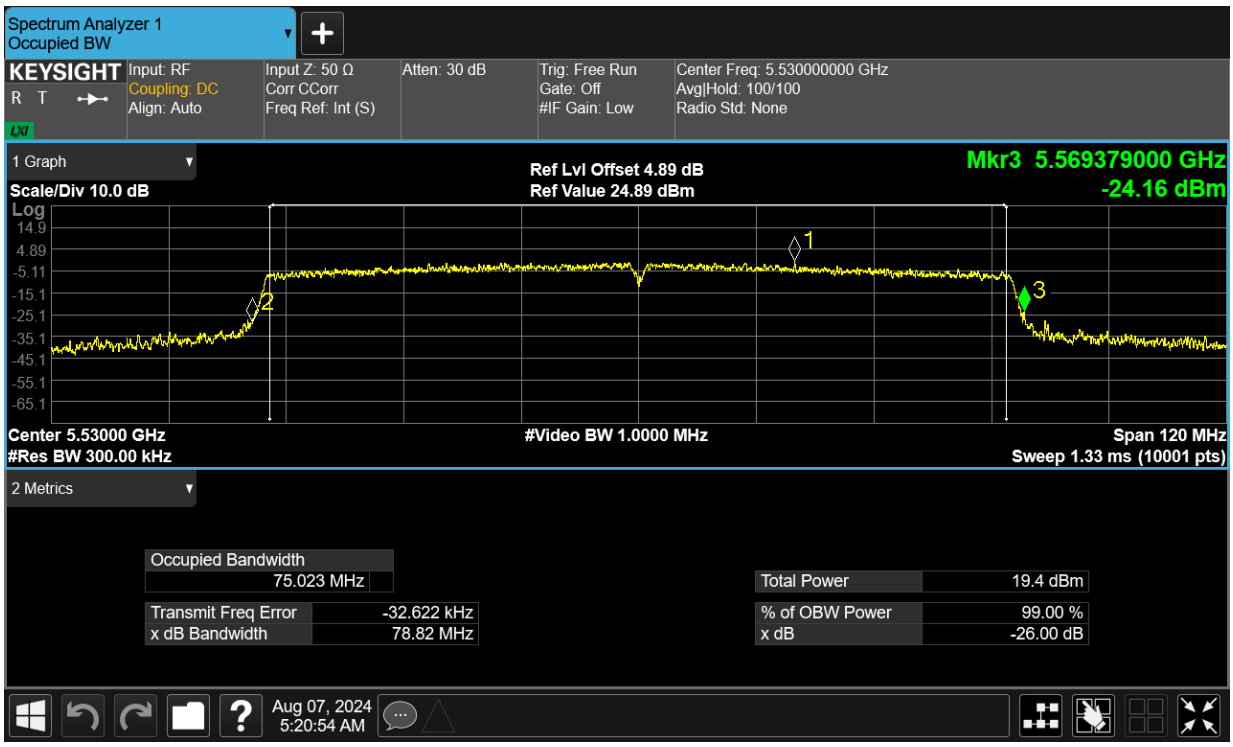
-26dB Bandwidth NVNT ac40 5590MHz Ant1



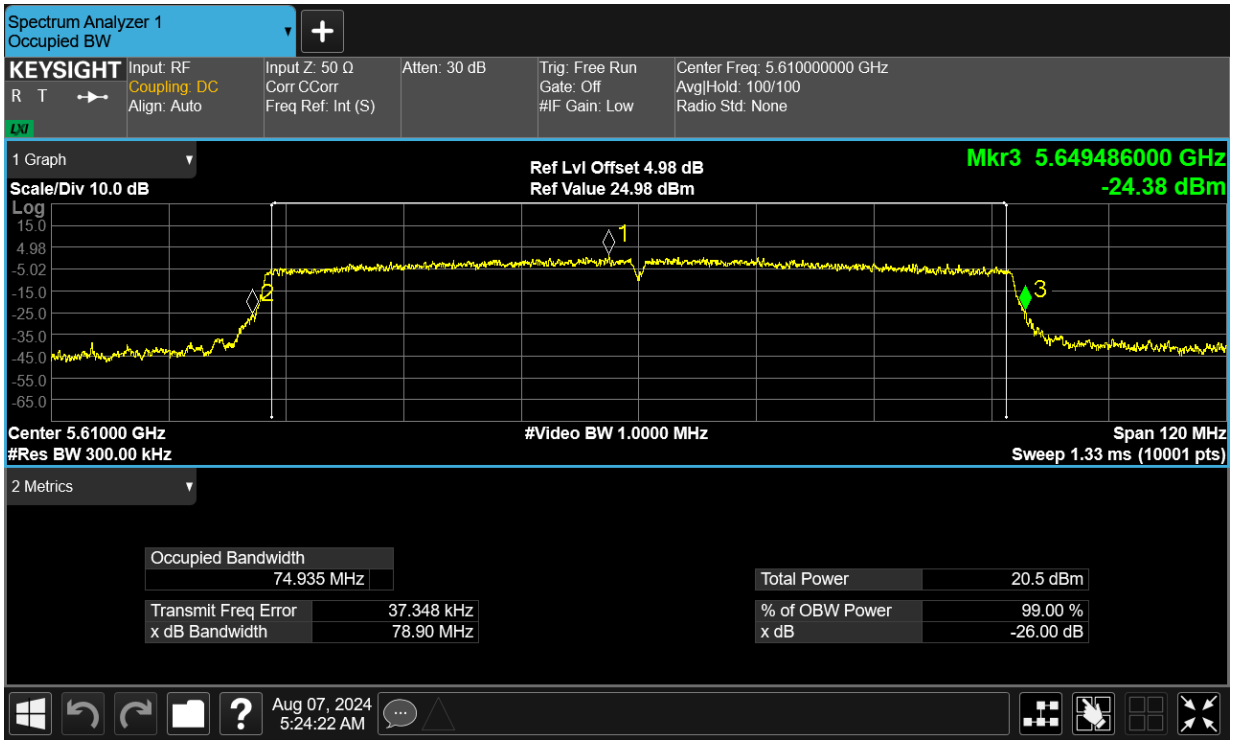
-26dB Bandwidth NVNT ac40 5670MHz Ant1



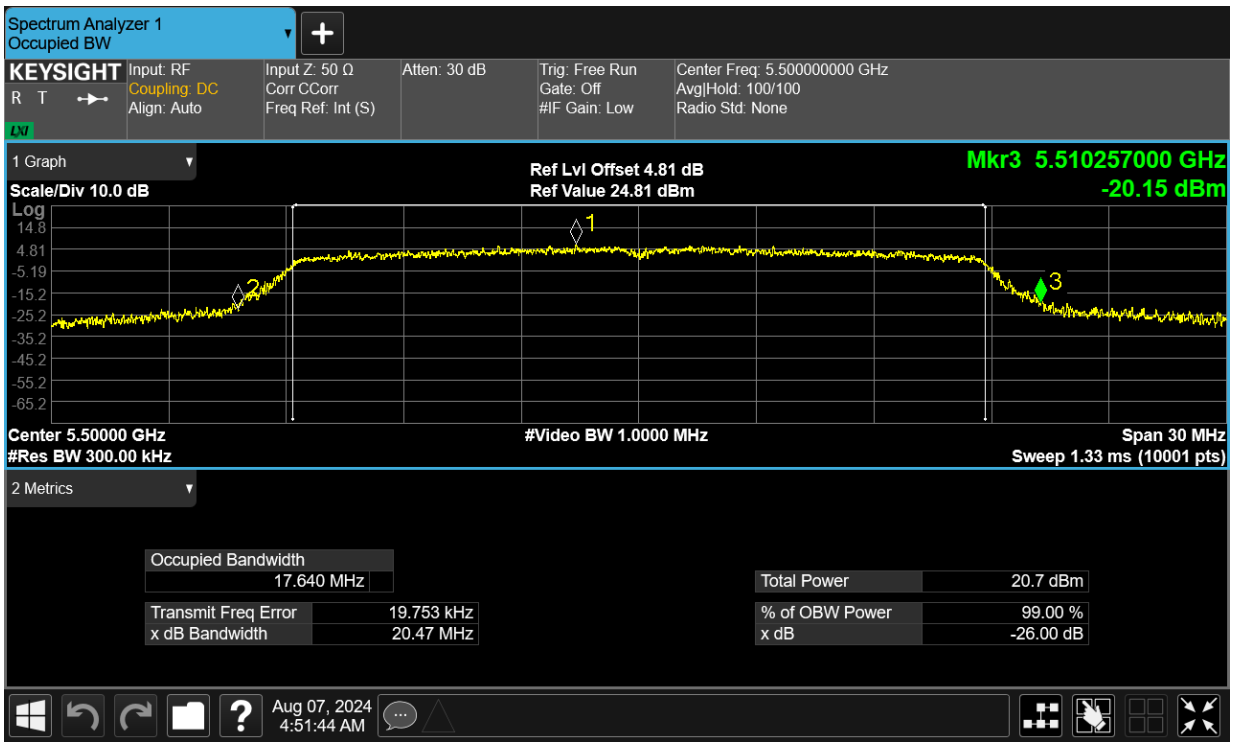
-26dB Bandwidth NVNT ac80 5530MHz Ant1



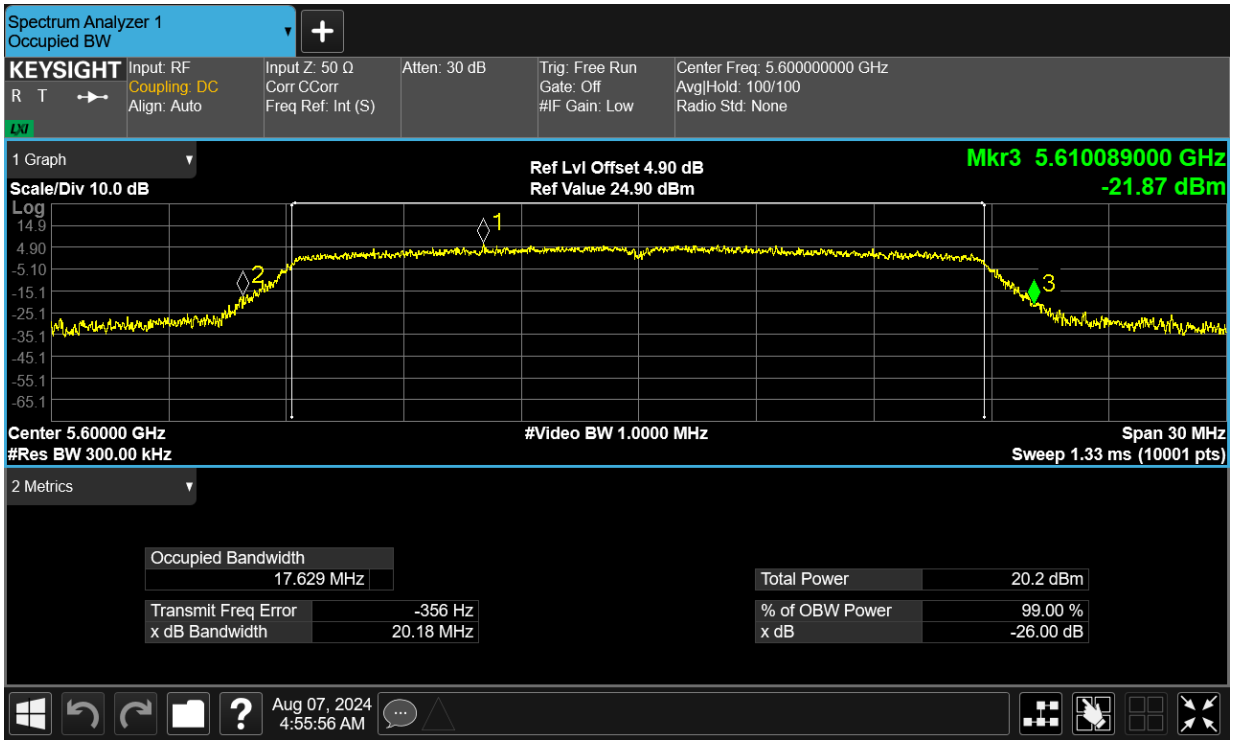
-26dB Bandwidth NVNT ac80 5610MHz Ant1



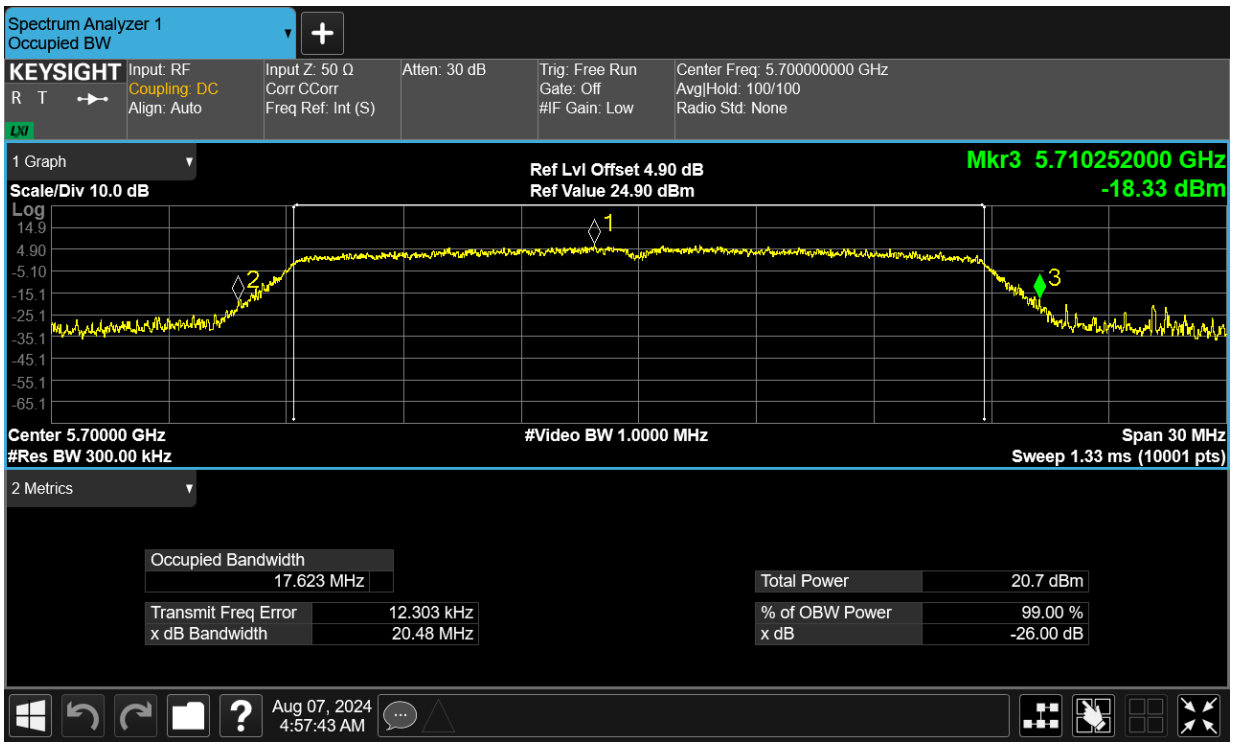
-26dB Bandwidth NVNT n20 5500MHz Ant1



-26dB Bandwidth NVNT n20 5600MHz Ant1

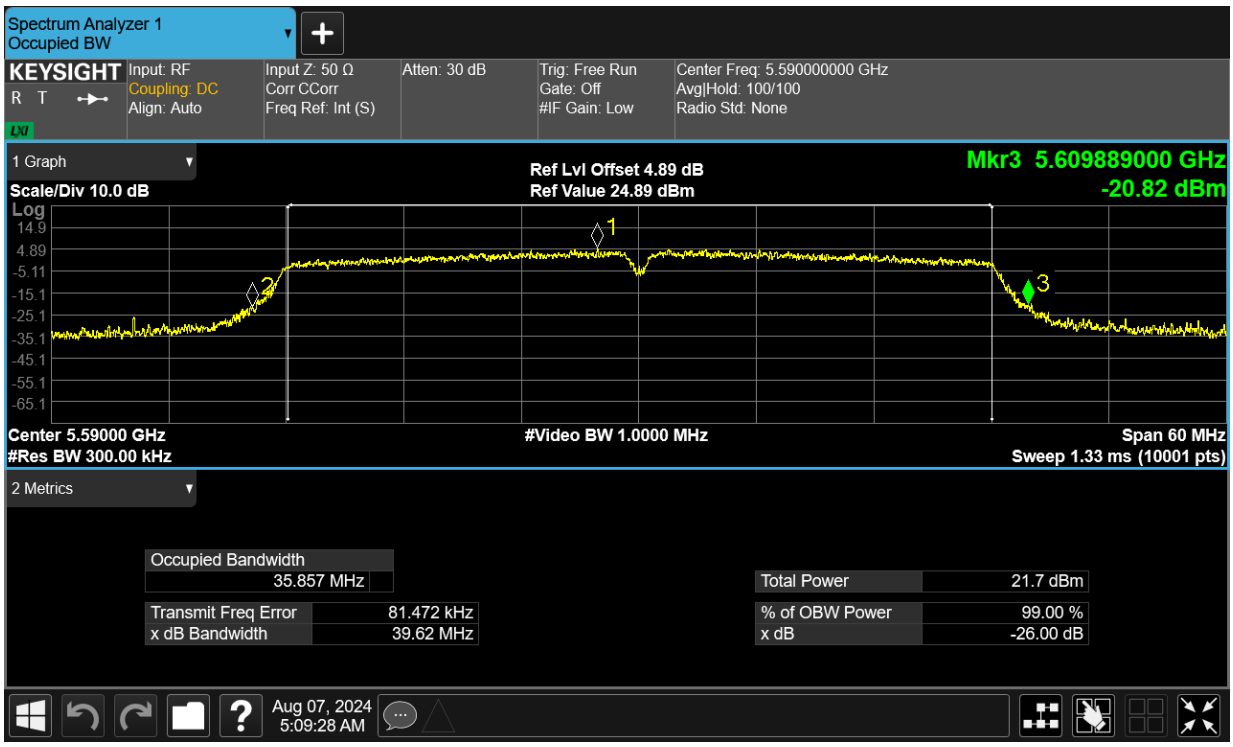


-26dB Bandwidth NVNT n20 5700MHz Ant1

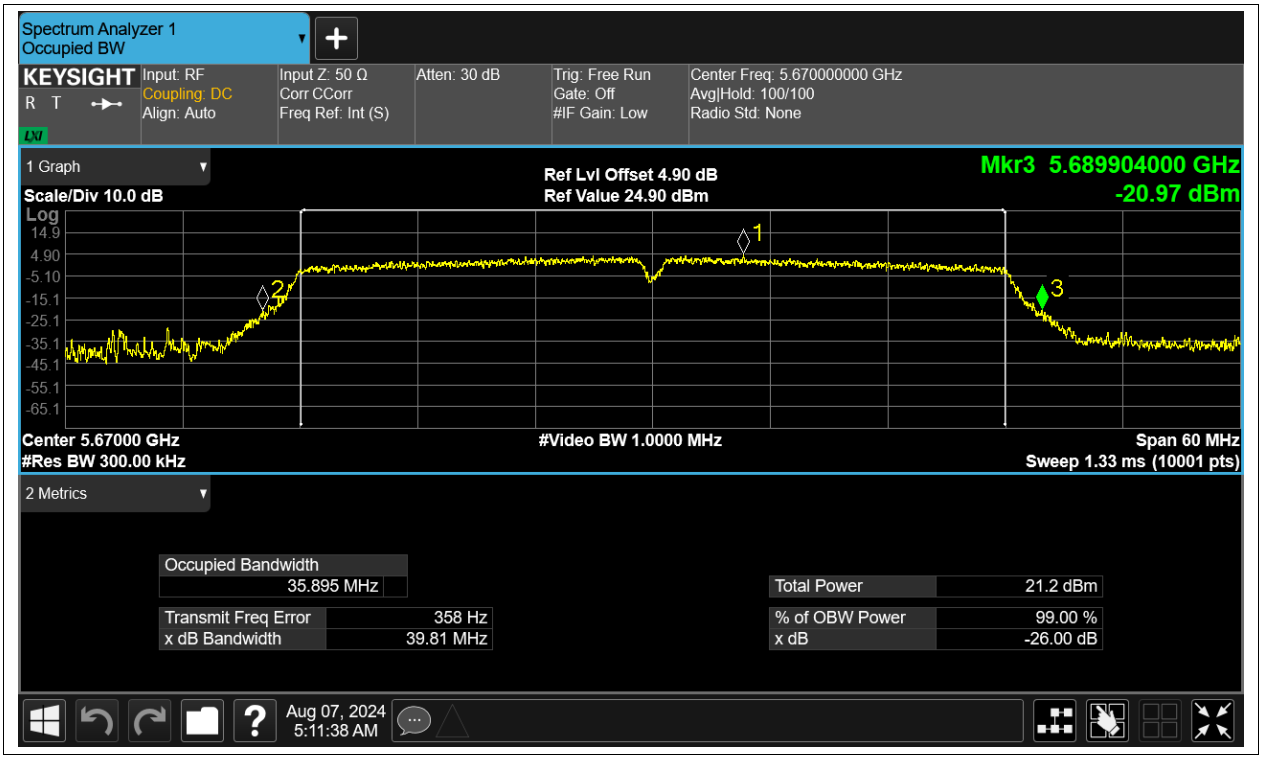


-26dB Bandwidth NVNT n40 5510MHz Ant1

-26dB Bandwidth NVNT n40 5590MHz Ant1



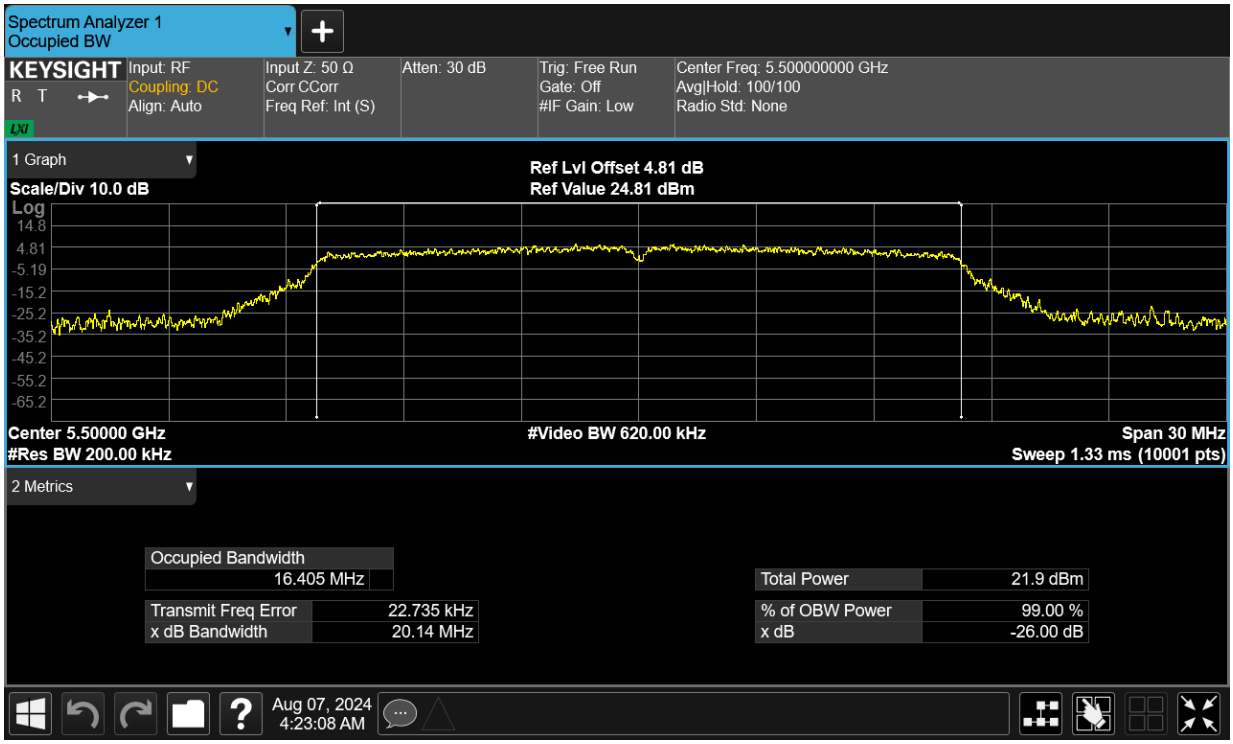
-26dB Bandwidth NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Mkr3 5.689904000 GHz
-20.97 dBm
Scale/Div 10.0 dB
Log
14.9
4.90
-5.10
-15.1
-25.1
-35.1
-45.1
-55.1
-65.1
Center 5.67000 GHz
#Res BW 300.00 kHz
#Video BW 1.0000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
35.895 MHz
Transmit Freq Error 358 Hz
x dB Bandwidth 39.81 MHz
Total Power 21.2 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Aug 07, 2024
5:11:38 AM

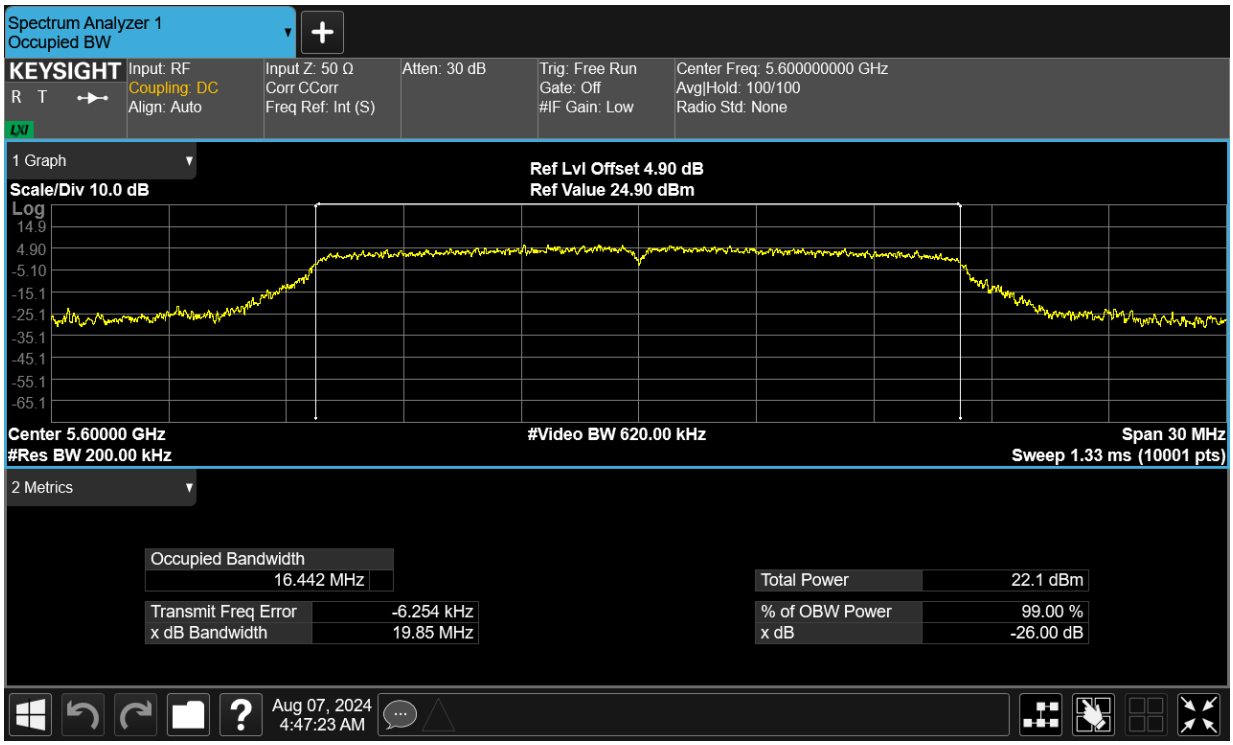
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.405
NVNT	a	5600	Ant1	16.442
NVNT	a	5700	Ant1	16.38
NVNT	ac20	5500	Ant1	17.556
NVNT	ac20	5600	Ant1	17.56
NVNT	ac20	5700	Ant1	17.56
NVNT	ac40	5510	Ant1	35.923
NVNT	ac40	5590	Ant1	35.904
NVNT	ac40	5670	Ant1	35.956
NVNT	ac80	5530	Ant1	75.048
NVNT	ac80	5610	Ant1	74.941
NVNT	n20	5500	Ant1	17.555
NVNT	n20	5600	Ant1	17.57
NVNT	n20	5700	Ant1	17.54
NVNT	n40	5510	Ant1	35.905
NVNT	n40	5590	Ant1	35.911
NVNT	n40	5670	Ant1	35.966

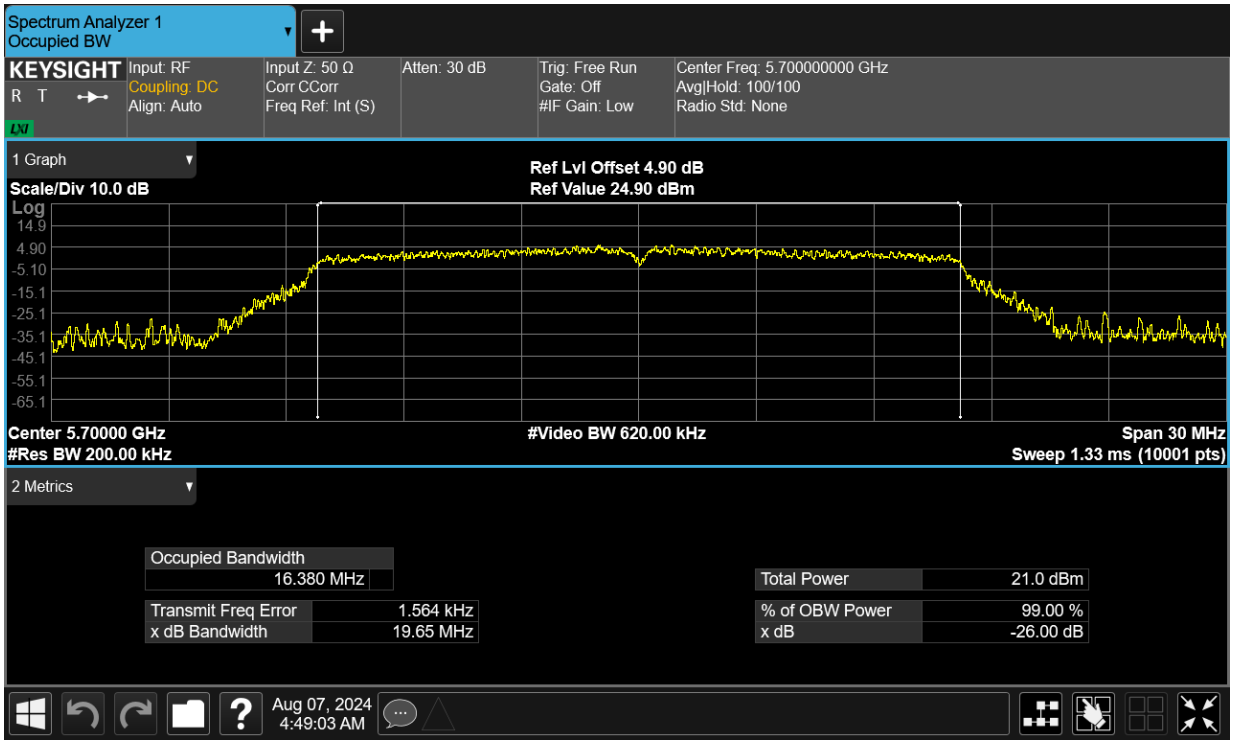
Test Graphs
OBW NVNT a 5500MHz Ant1



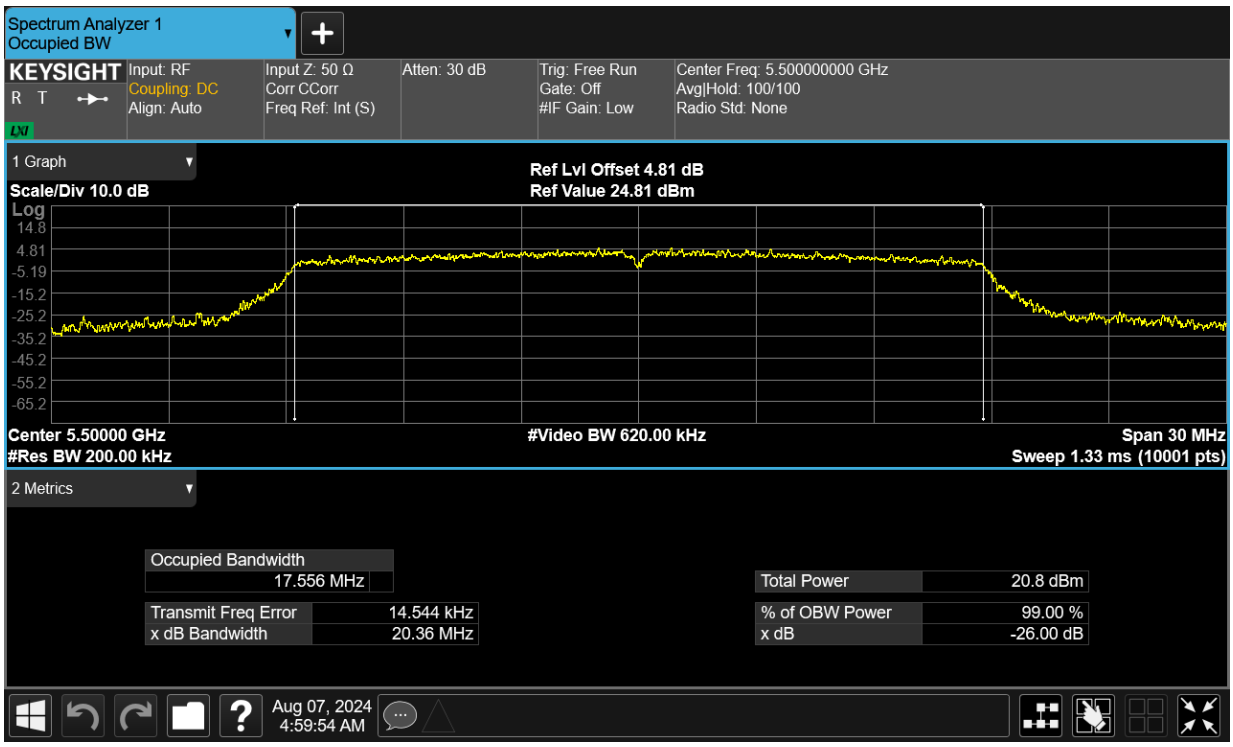
OBW NVNT a 5600MHz Ant1



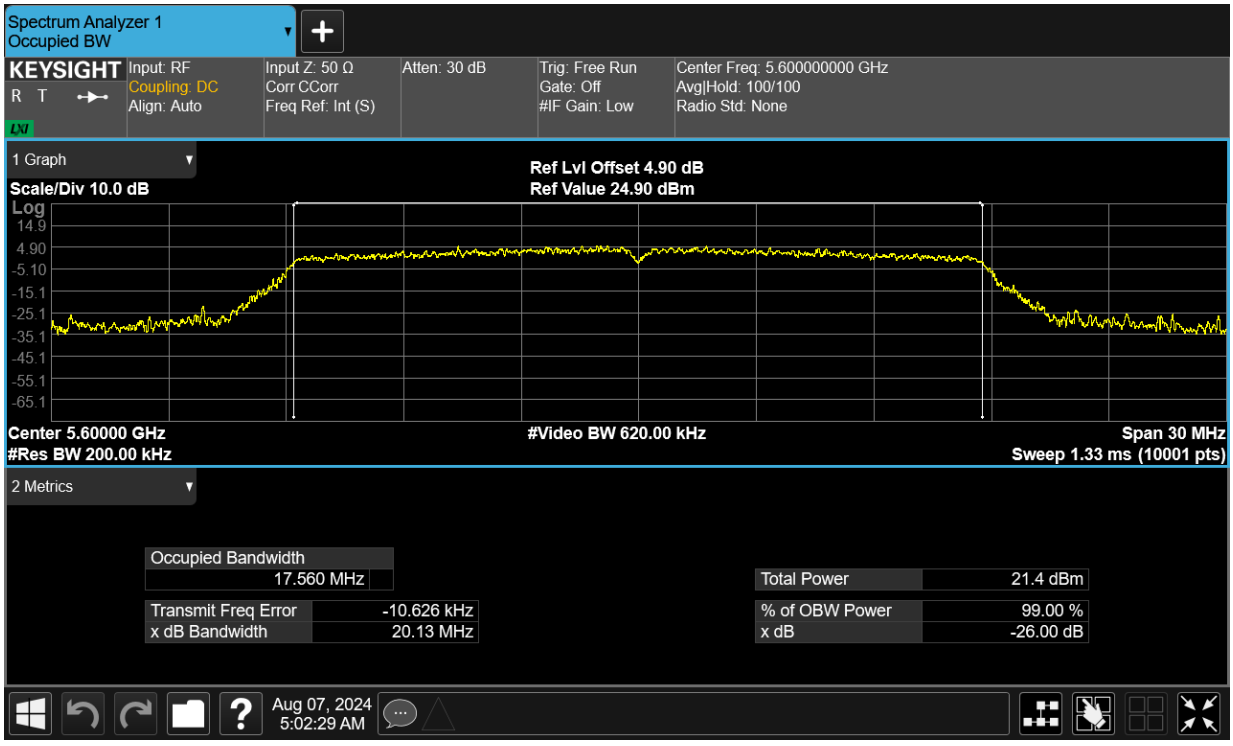
OBW NVNT a 5700MHz Ant1



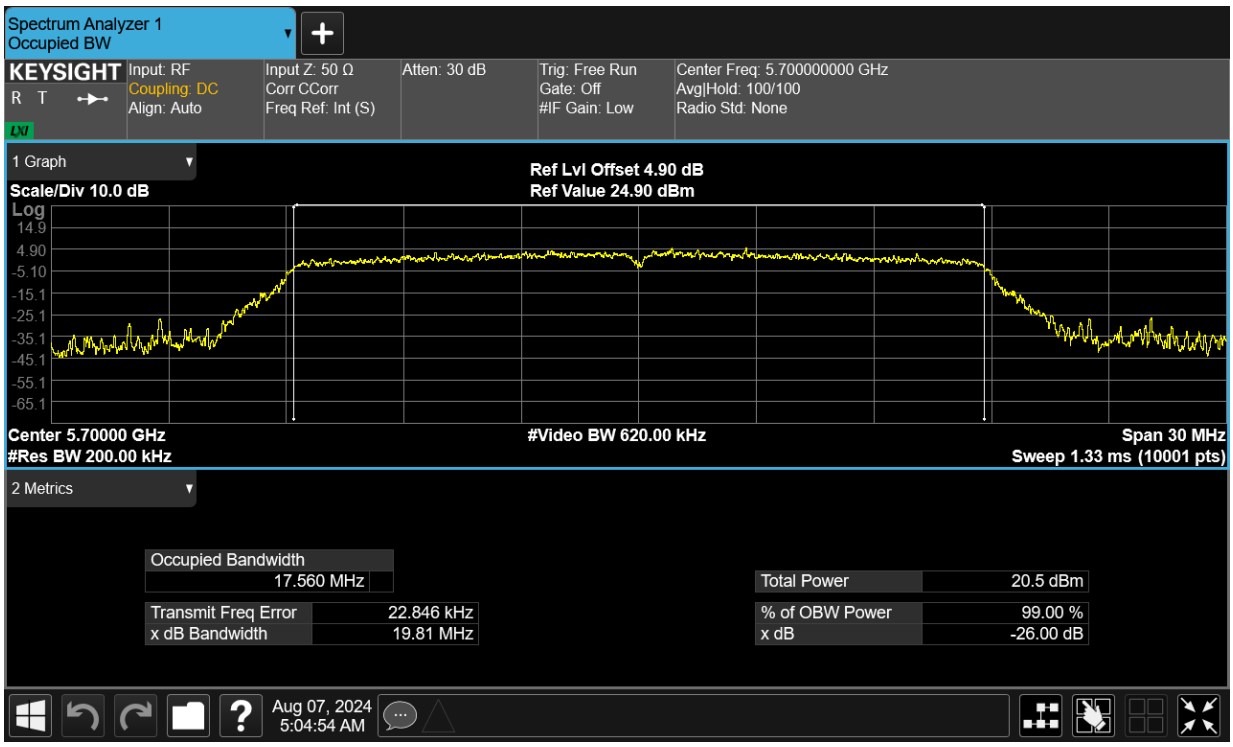
OBW NVNT ac20 5500MHz Ant1



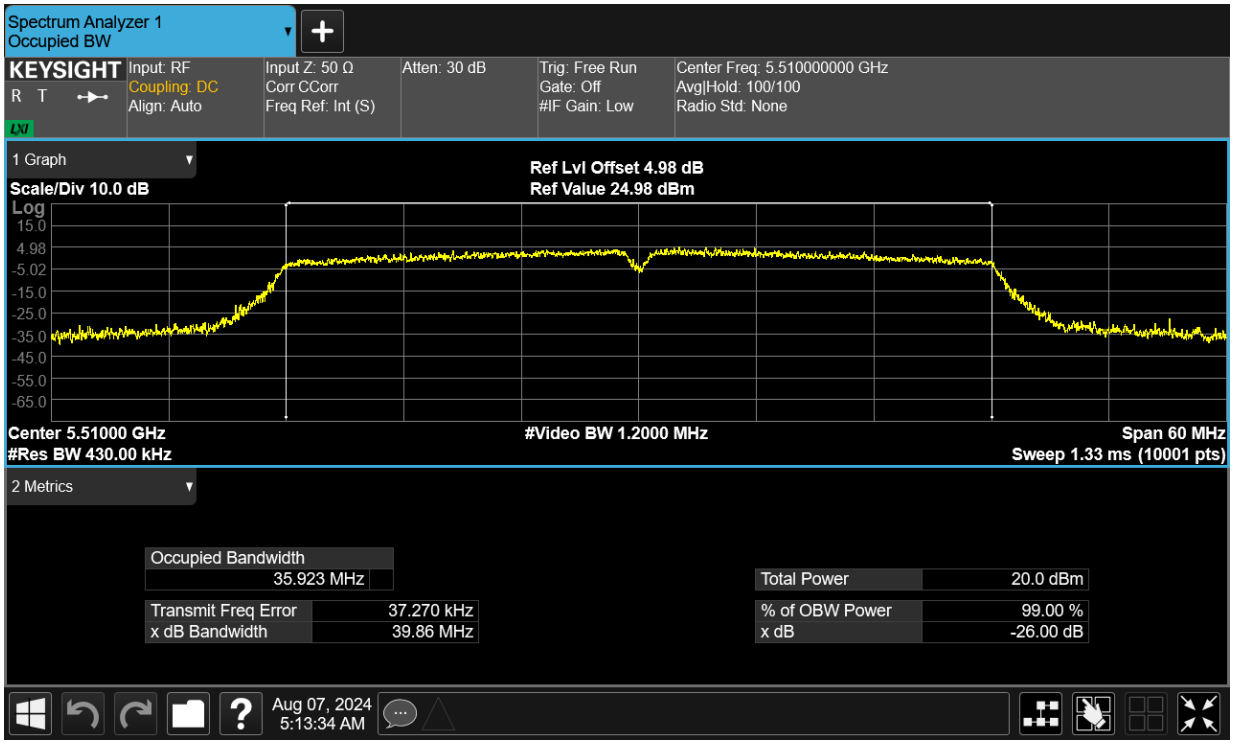
OBW NVNT ac20 5600MHz Ant1



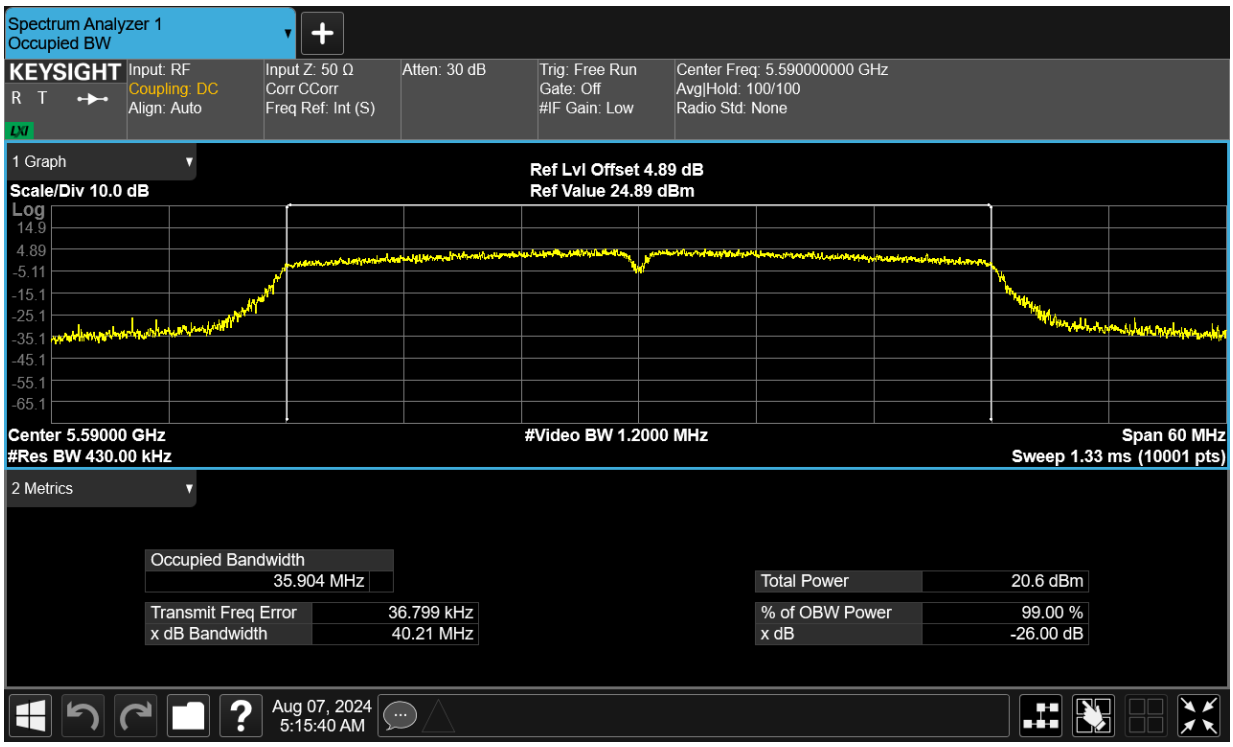
OBW NVNT ac20 5700MHz Ant1



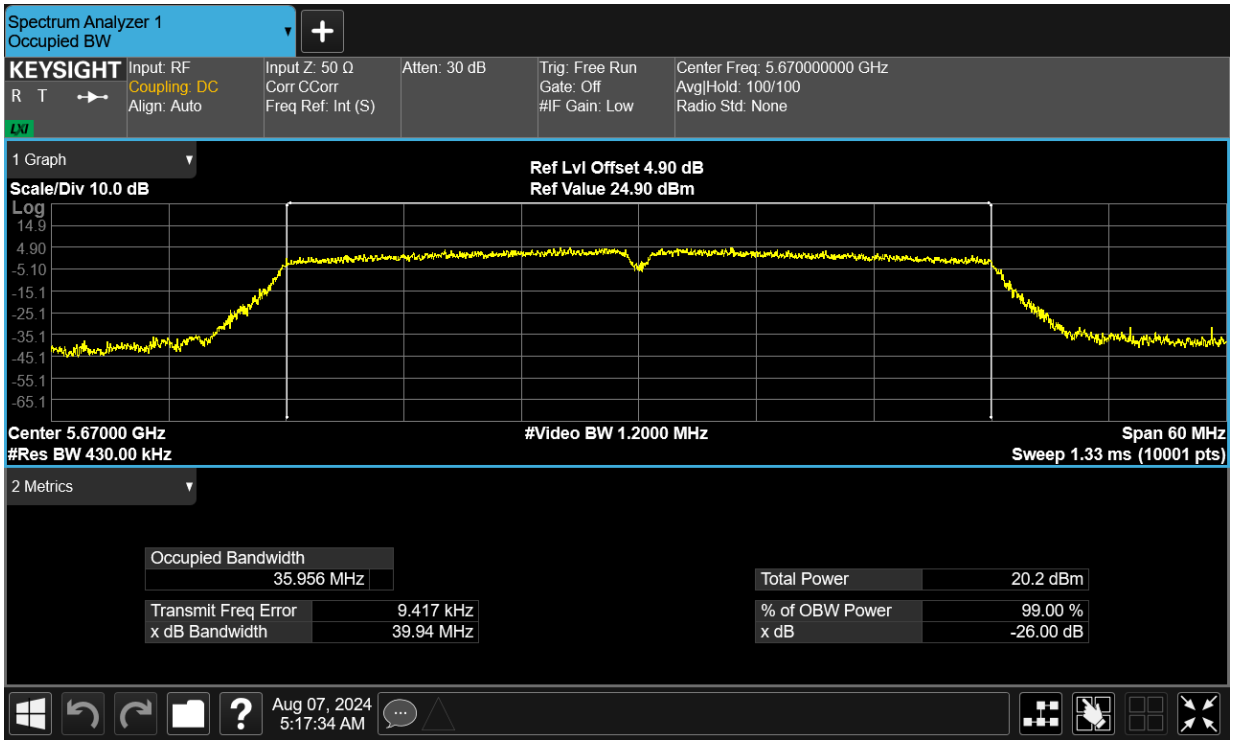
OBW NVNT ac40 5510MHz Ant1



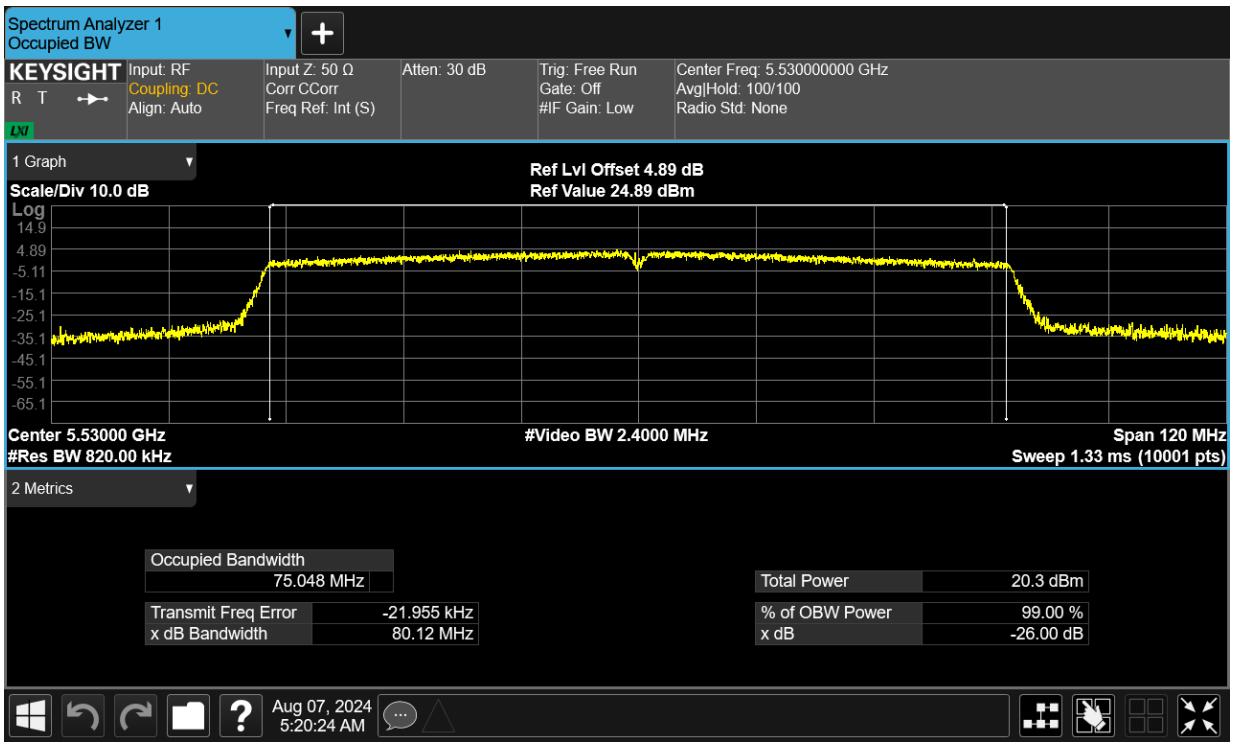
OBW NVNT ac40 5590MHz Ant1



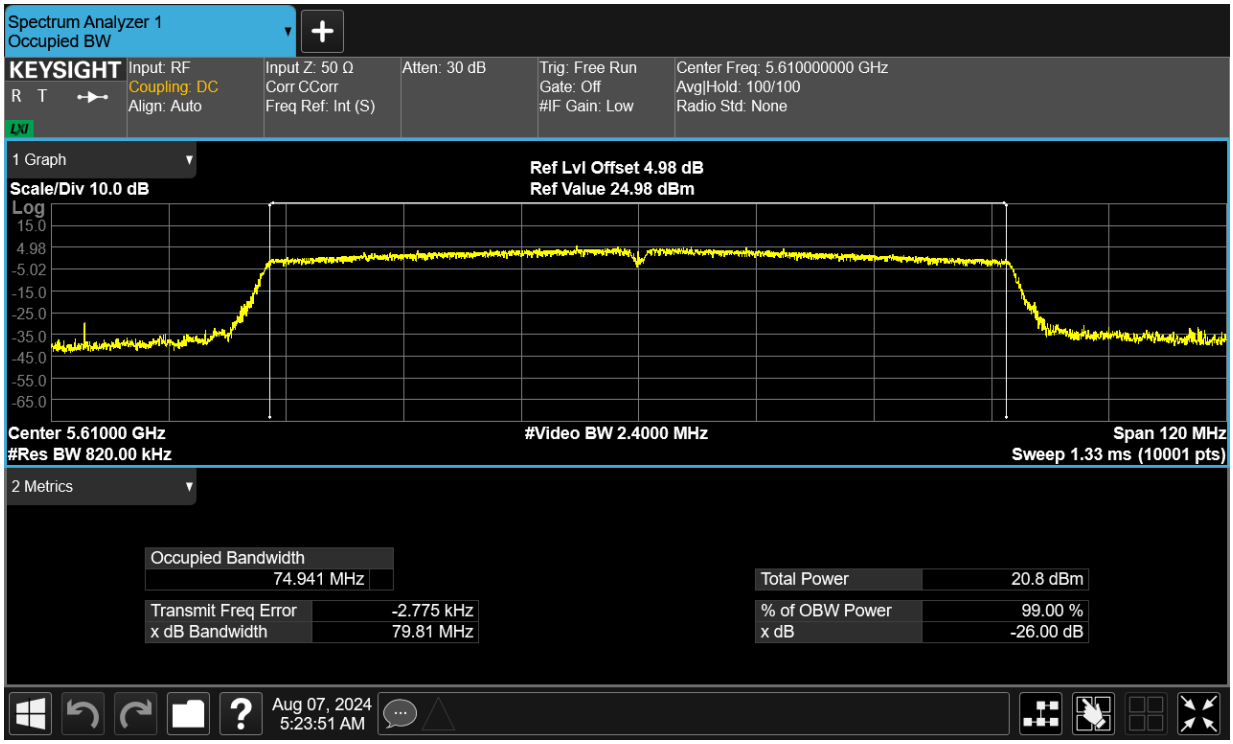
OBW NVNT ac40 5670MHz Ant1



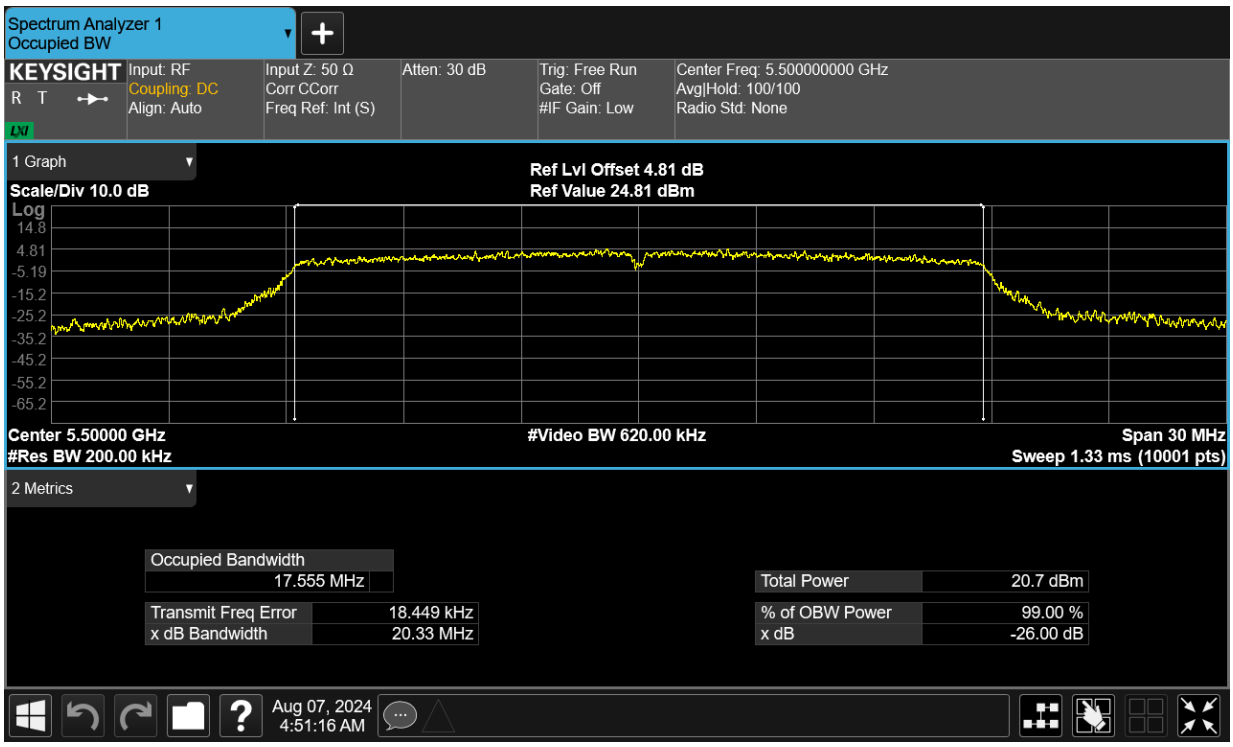
OBW NVNT ac80 5530MHz Ant1



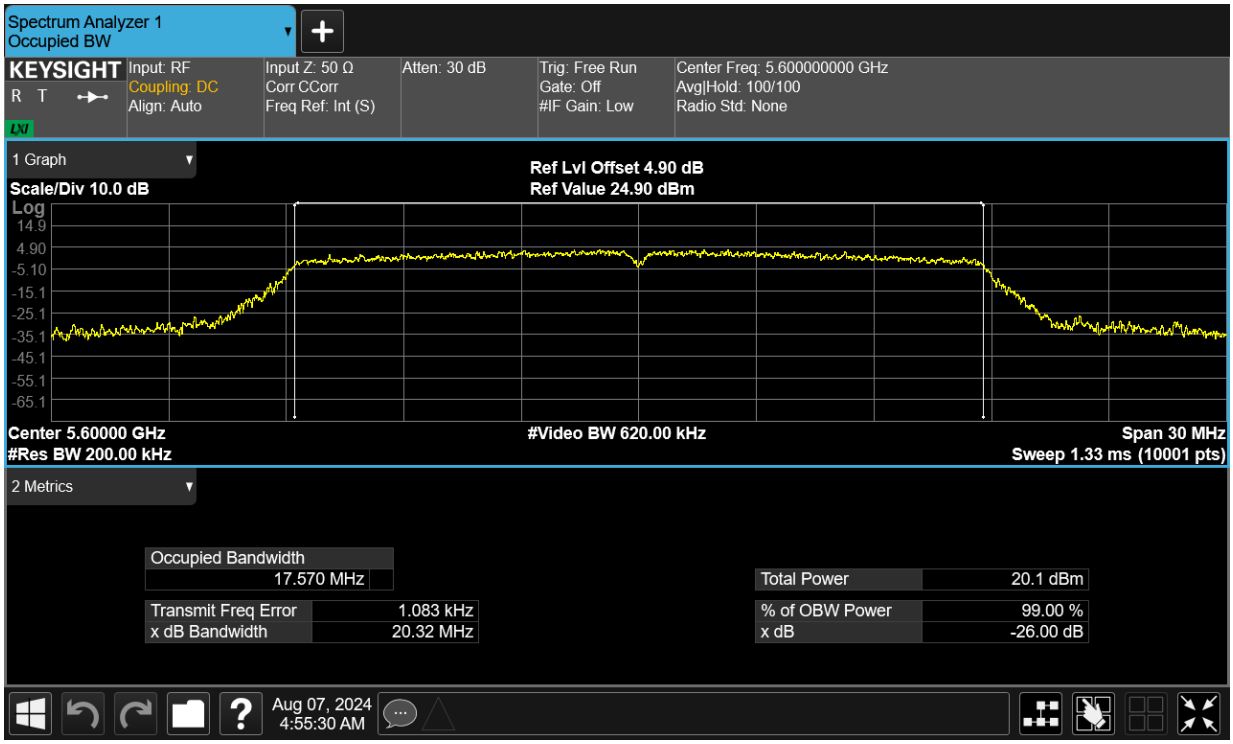
OBW NVNT ac80 5610MHz Ant1



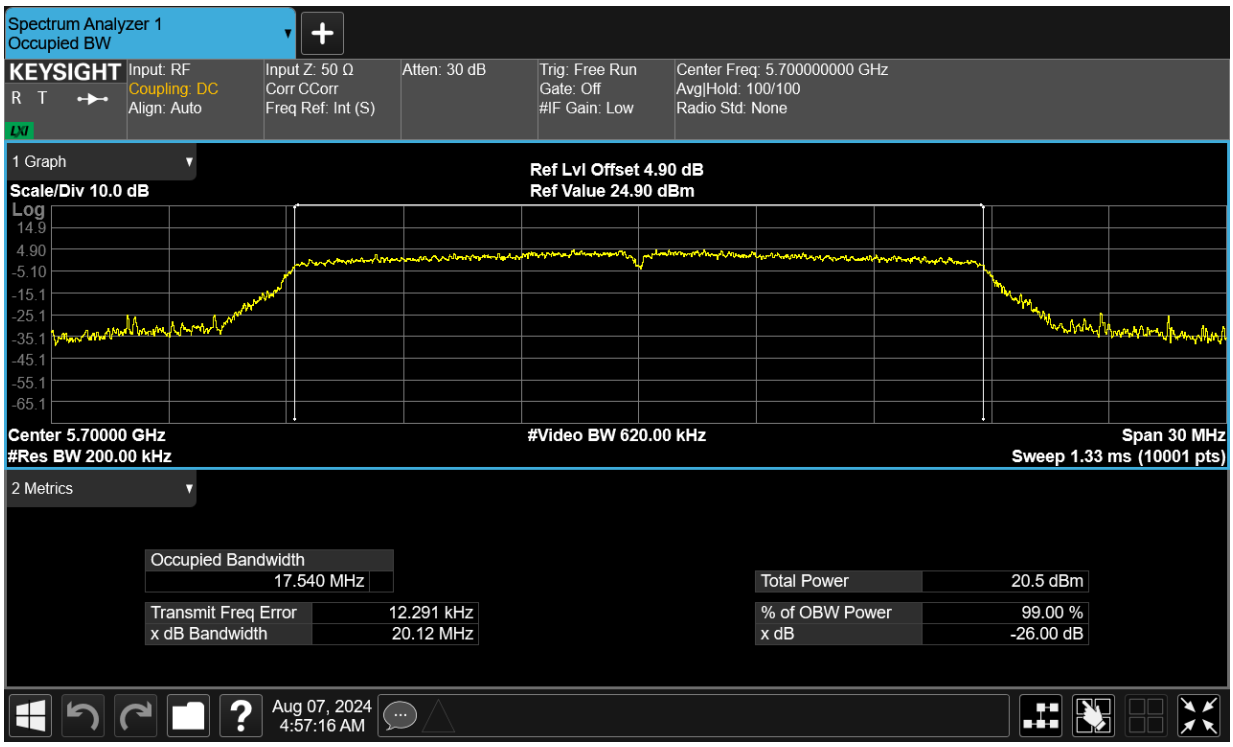
OBW NVNT n20 5500MHz Ant1



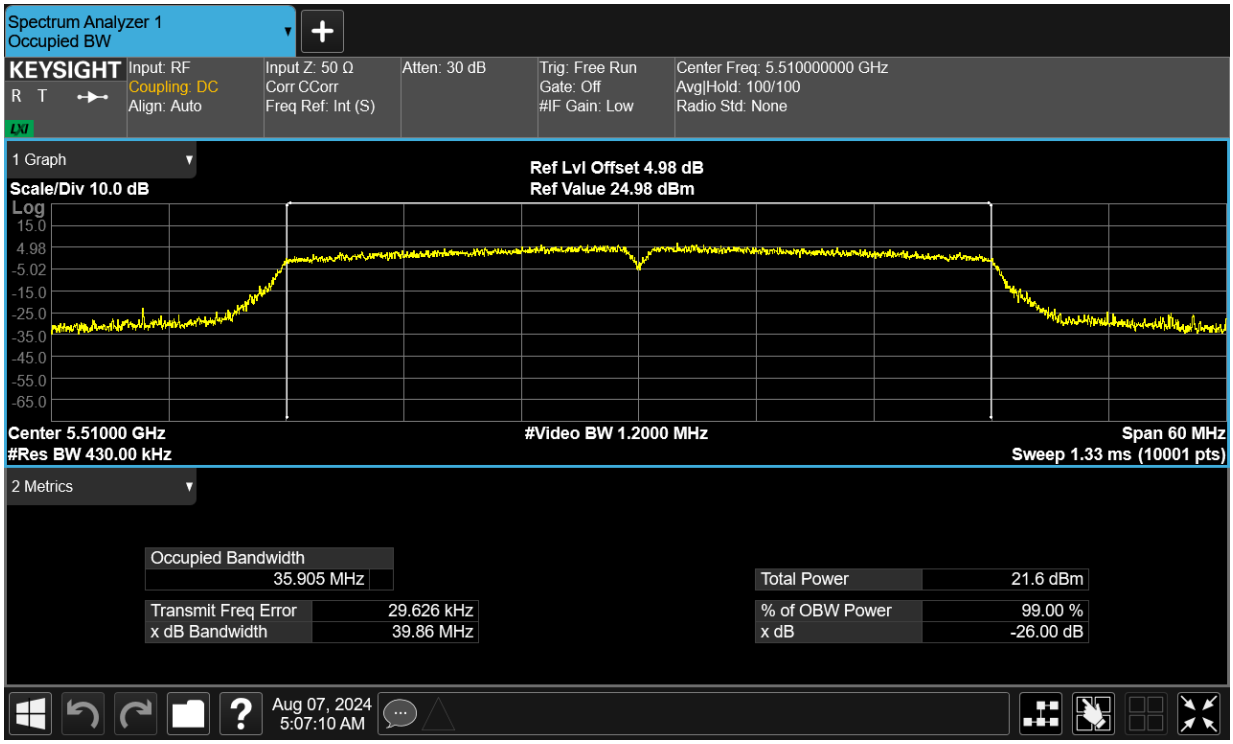
OBW NVNT n20 5600MHz Ant1



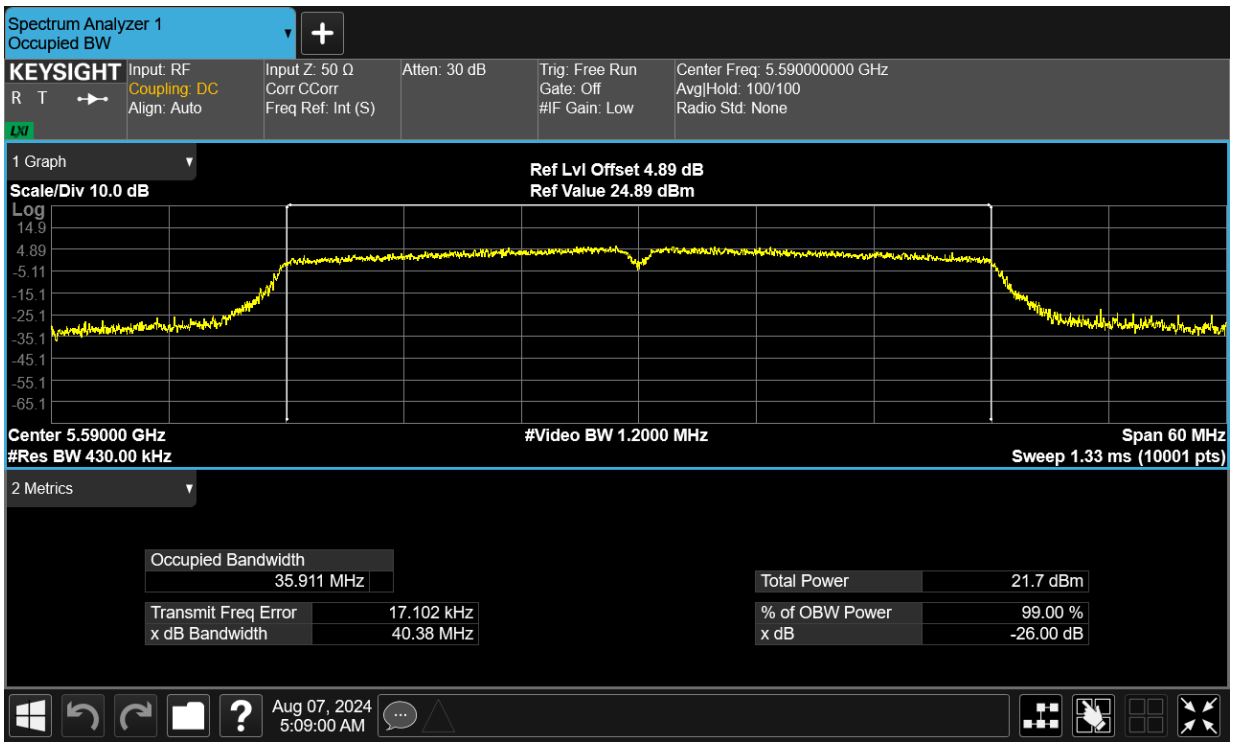
OBW NVNT n20 5700MHz Ant1



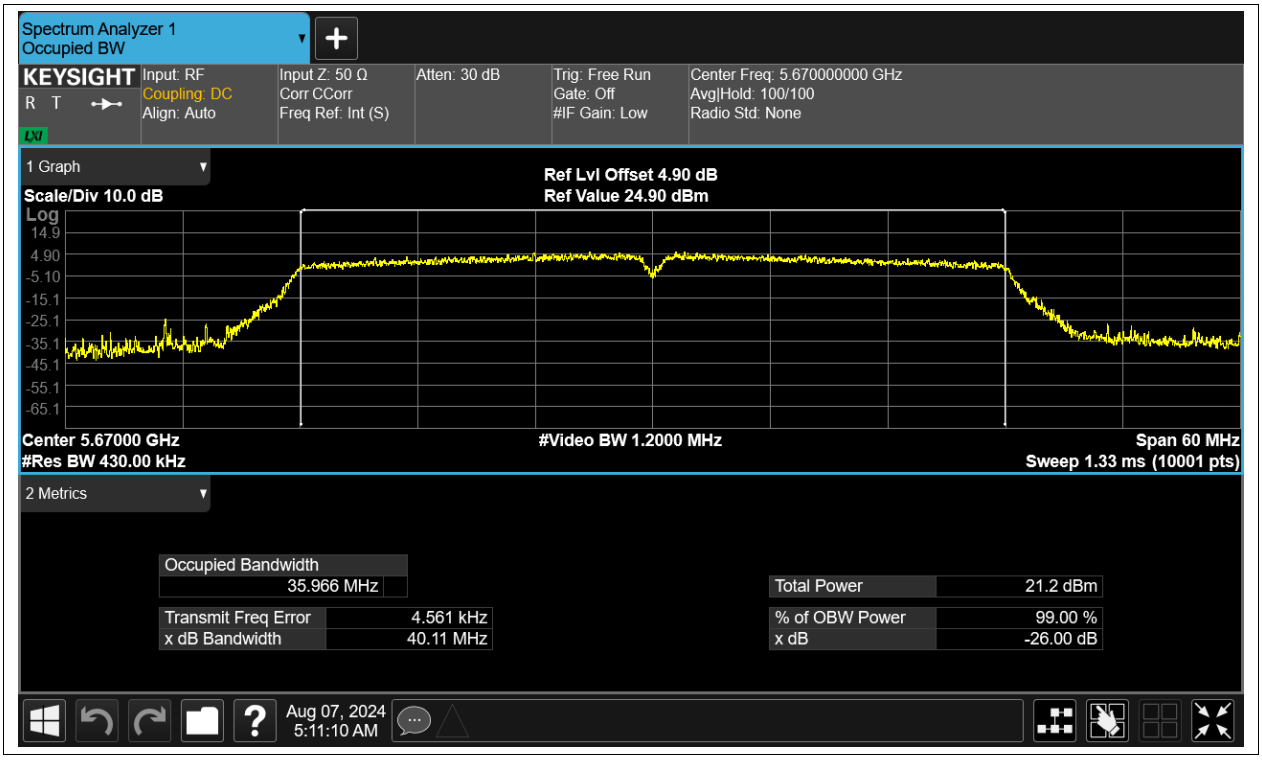
OBW NVNT n40 5510MHz Ant1



OBW NVNT n40 5590MHz Ant1



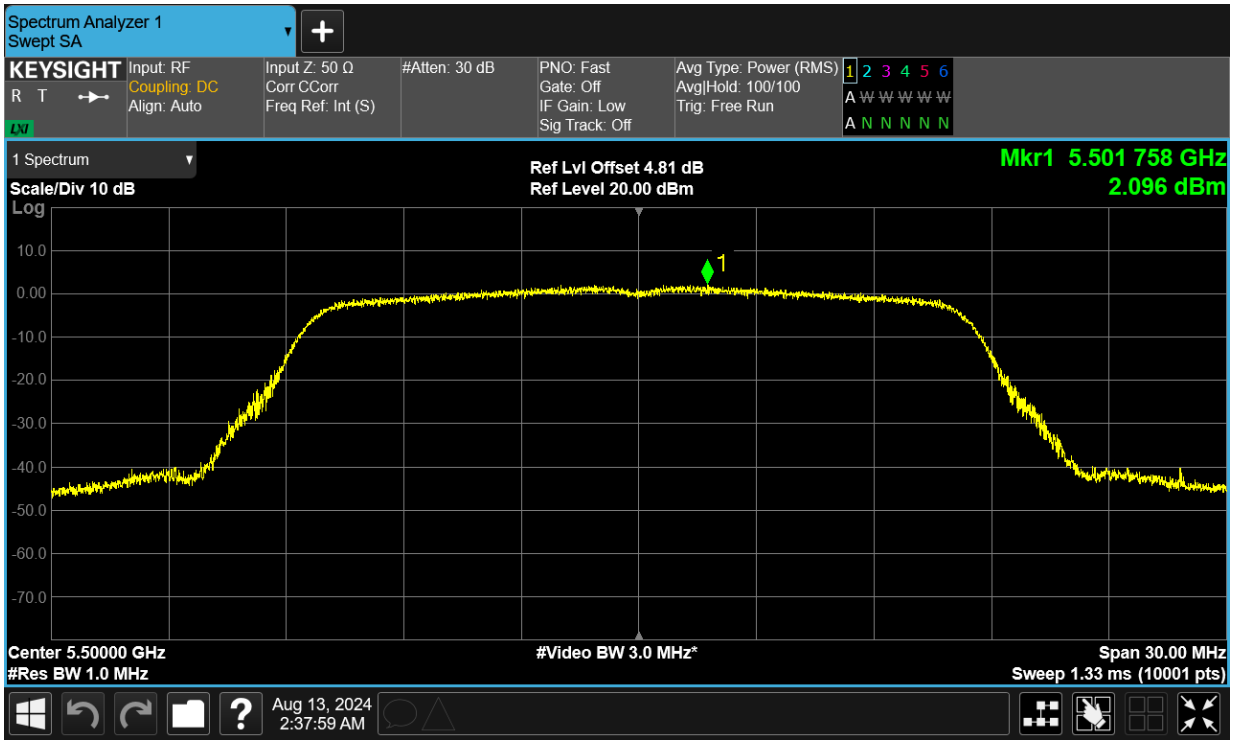
OBW NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 5.670000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 4.90 dB
Ref Value 24.90 dBm
Scale/Div 10.0 dB
Log
14.9
4.90
-5.10
-15.1
-25.1
-35.1
-45.1
-55.1
-65.1
Center 5.67000 GHz
#Res BW 430.00 kHz
#Video BW 1.2000 MHz
Span 60 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
35.966 MHz
Transmit Freq Error 4.561 kHz
x dB Bandwidth 40.11 MHz
Total Power 21.2 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Aug 07, 2024
5:11:10 AM

Maximum Power Spectral Density Level

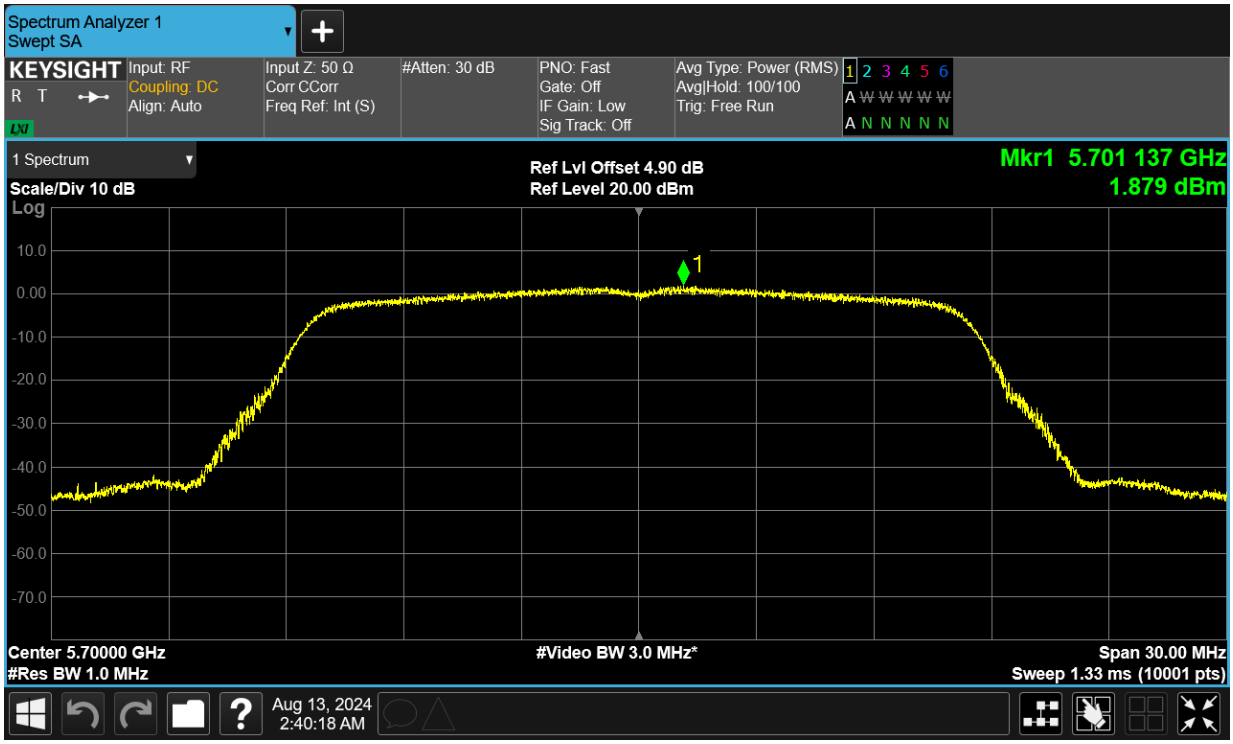
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	2.096	11	Pass
NVNT	a	5600	Ant1	2.362	11	Pass
NVNT	a	5700	Ant1	1.879	11	Pass
NVNT	ac20	5500	Ant1	1.935	11	Pass
NVNT	ac20	5600	Ant1	2.388	11	Pass
NVNT	ac20	5700	Ant1	1.906	11	Pass
NVNT	ac40	5510	Ant1	-4.102	11	Pass
NVNT	ac40	5590	Ant1	-4.013	11	Pass
NVNT	ac40	5670	Ant1	-3.874	11	Pass
NVNT	ac80	5530	Ant1	-6.863	11	Pass
NVNT	ac80	5610	Ant1	-5.95	11	Pass
NVNT	n20	5500	Ant1	2	11	Pass
NVNT	n20	5600	Ant1	2.081	11	Pass
NVNT	n20	5700	Ant1	1.625	11	Pass
NVNT	n40	5510	Ant1	-4.022	11	Pass
NVNT	n40	5590	Ant1	-3.572	11	Pass
NVNT	n40	5670	Ant1	-4.388	11	Pass

Test Graphs
PSD NVNT a 5500MHz Ant1

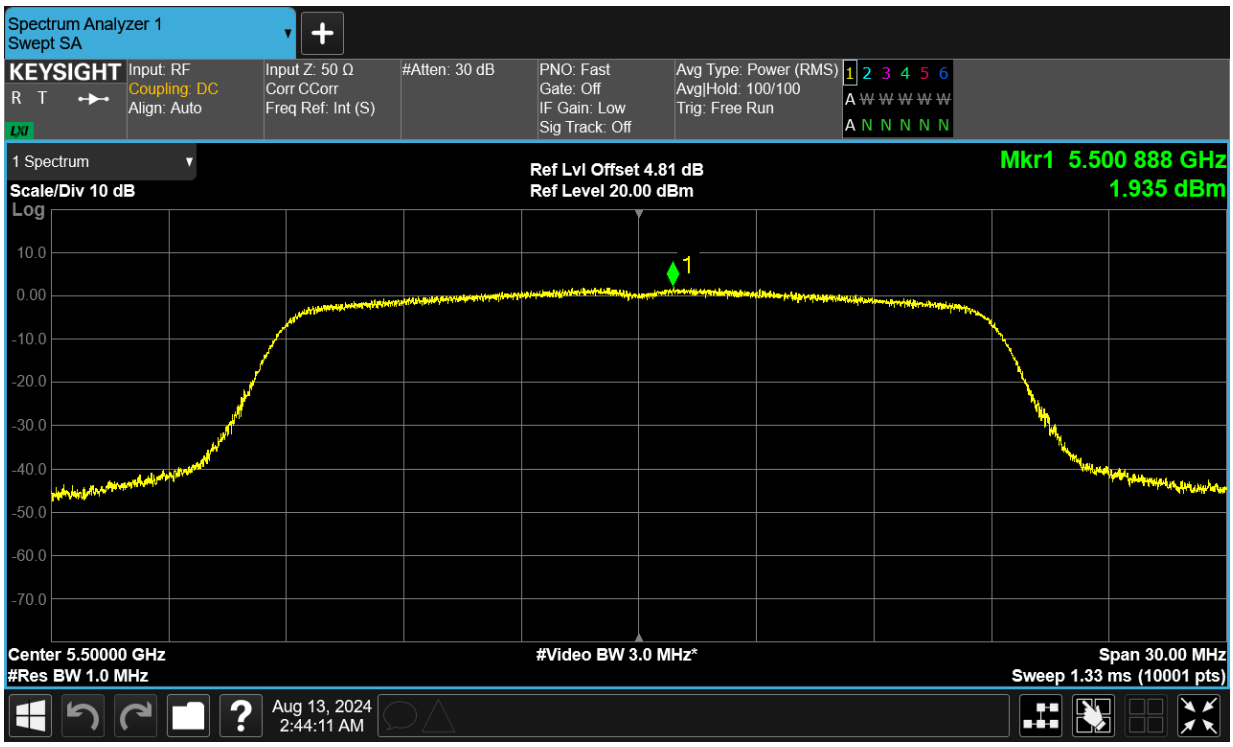


PSD NVNT a 5600MHz Ant1

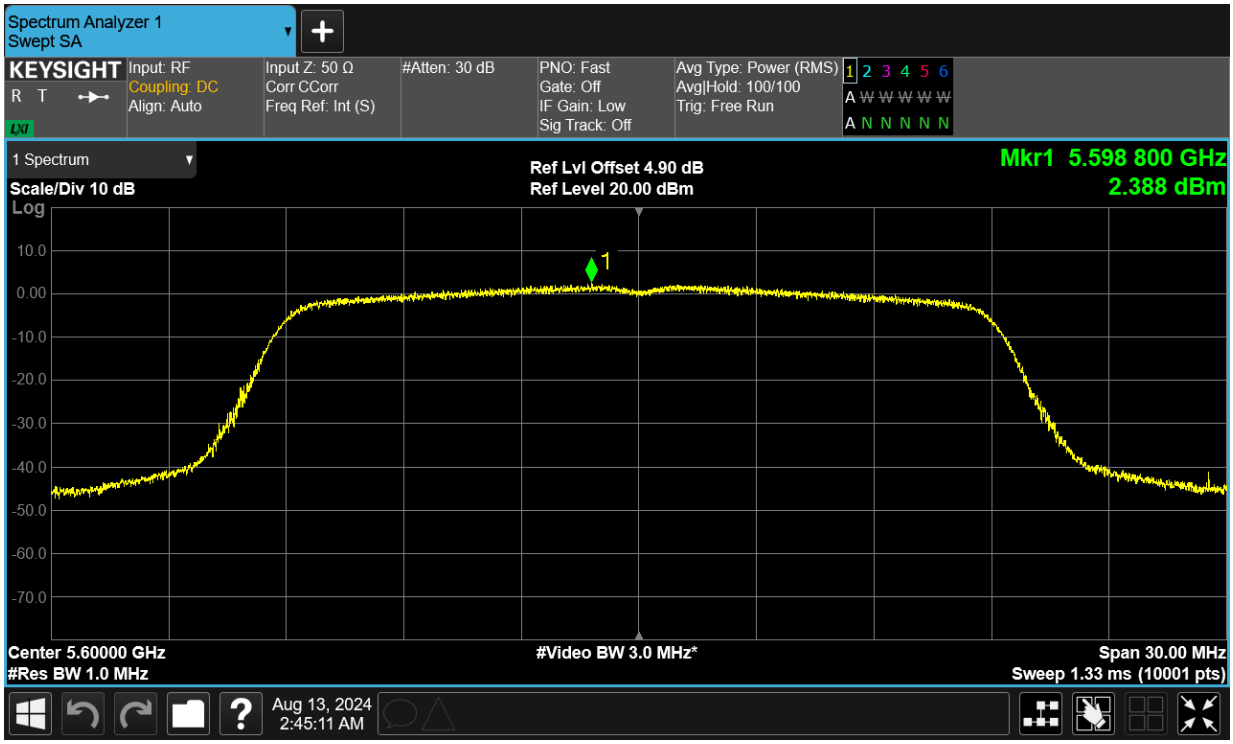
PSD NVNT a 5700MHz Ant1



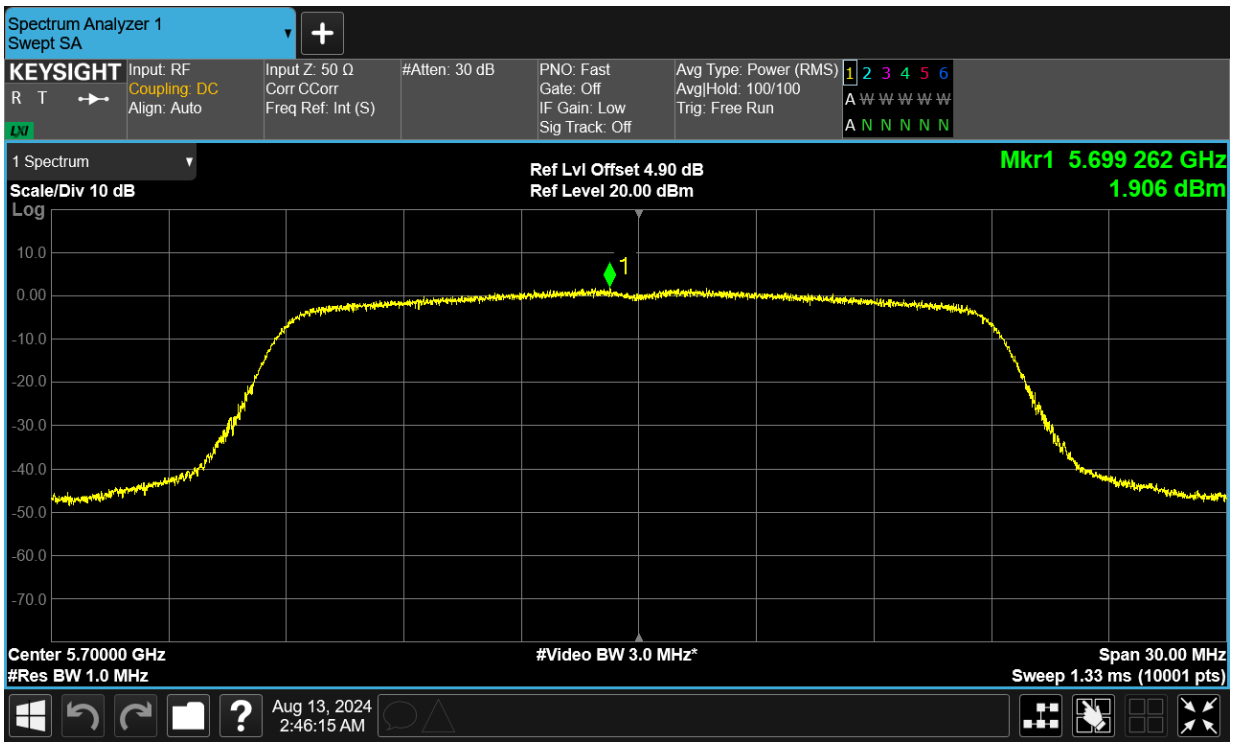
PSD NVNT ac20 5500MHz Ant1



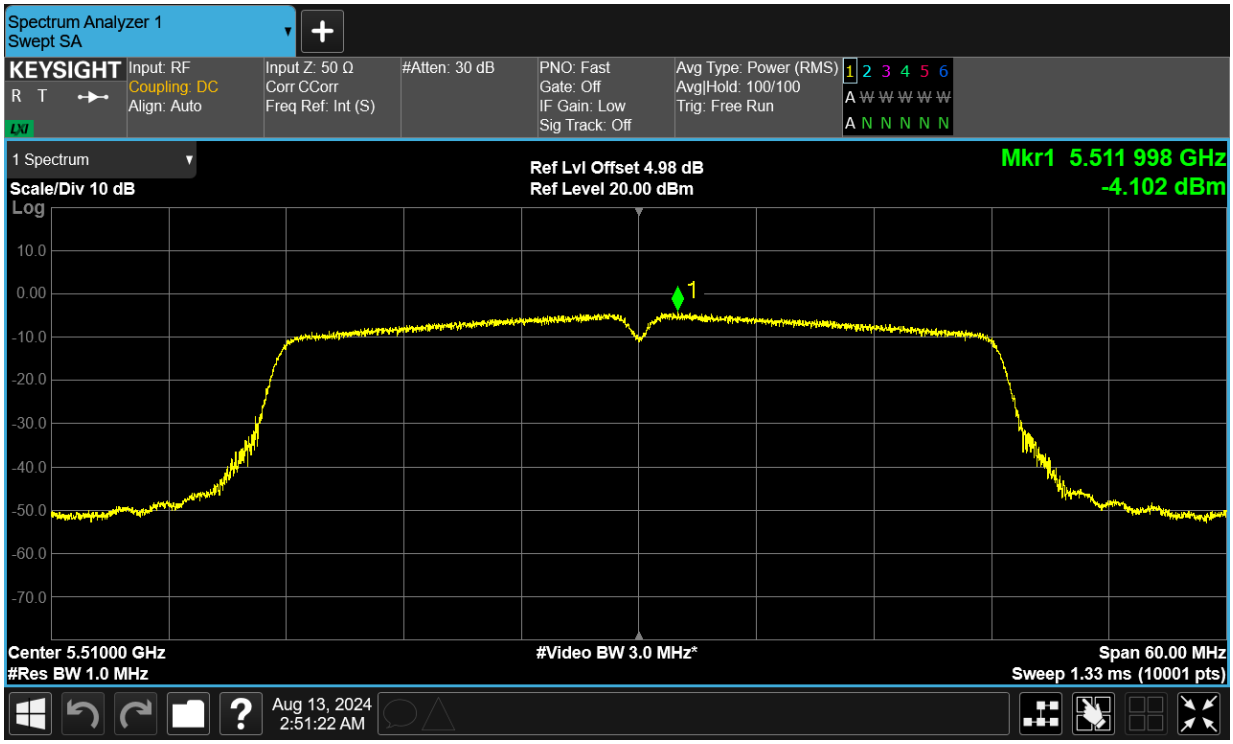
PSD NVNT ac20 5600MHz Ant1



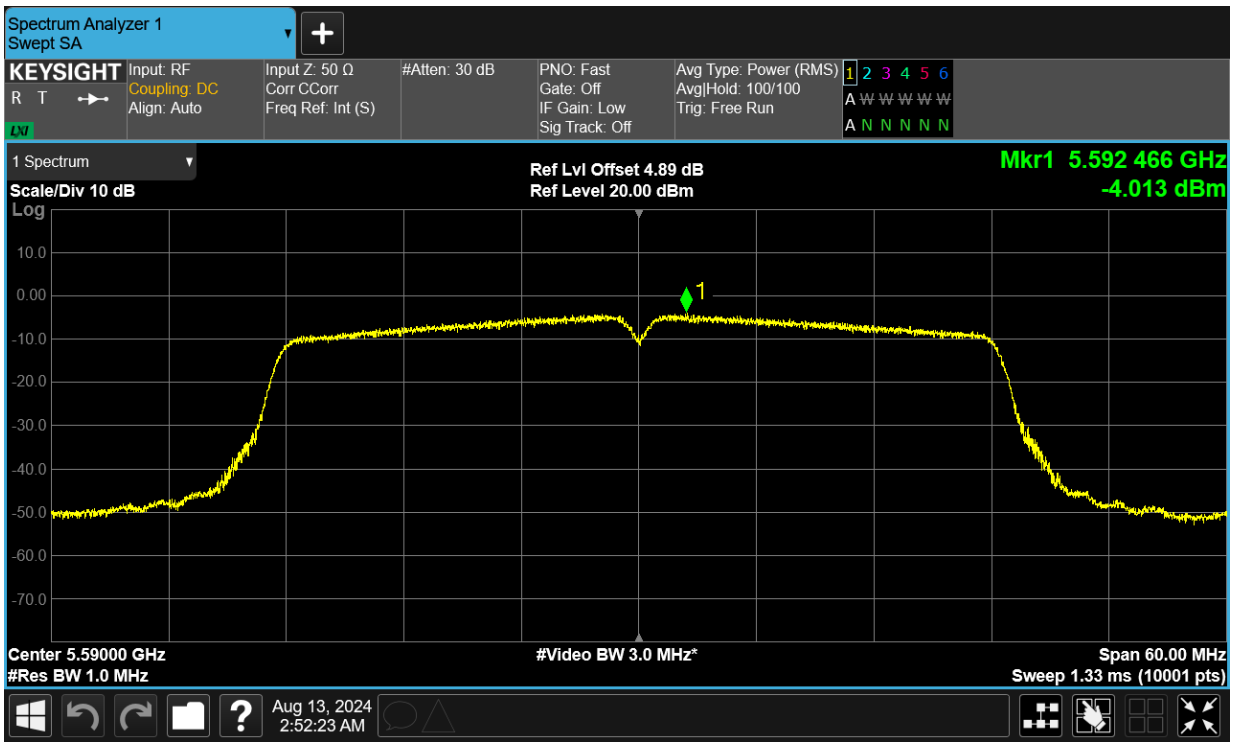
PSD NVNT ac20 5700MHz Ant1



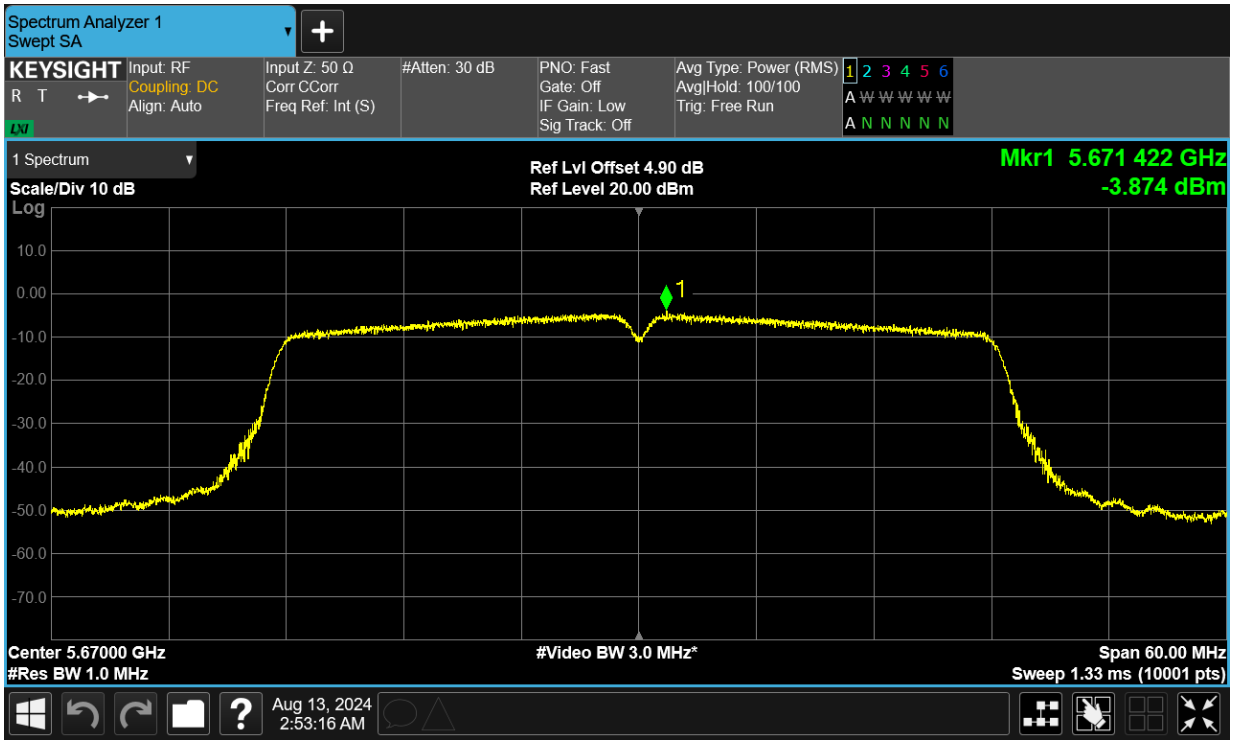
PSD NVNT ac40 5510MHz Ant1



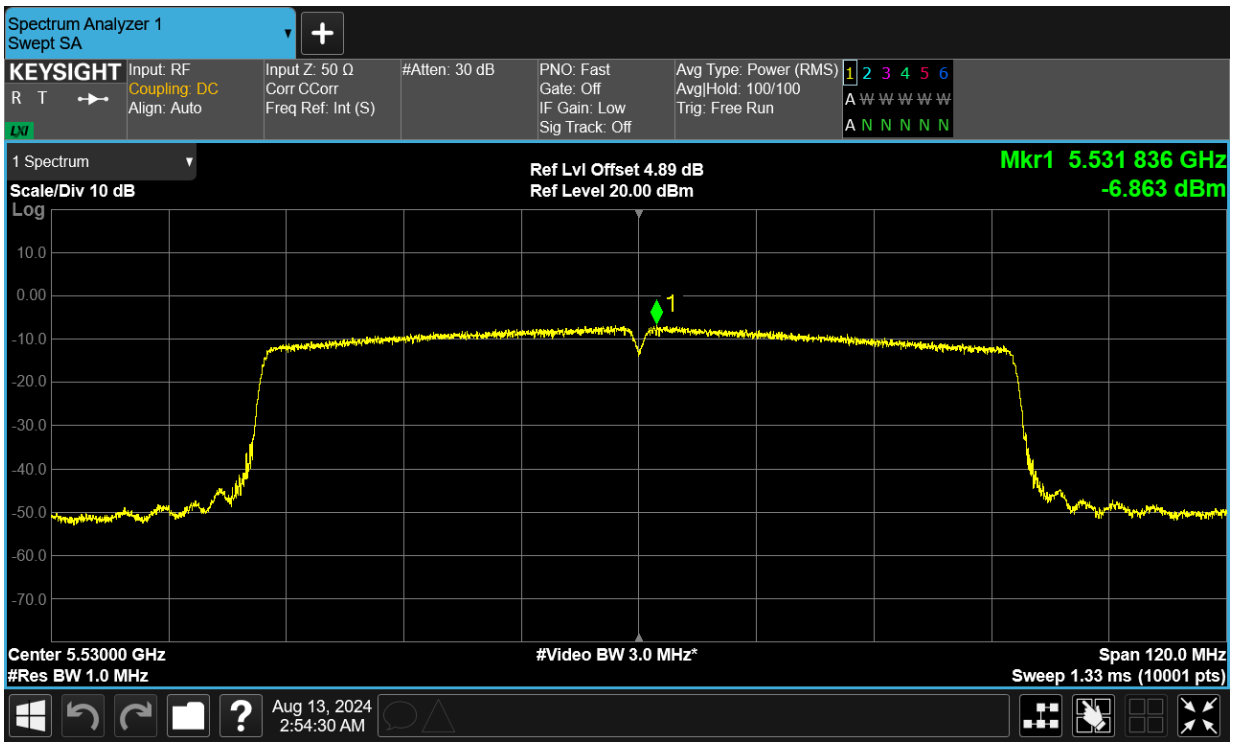
PSD NVNT ac40 5590MHz Ant1



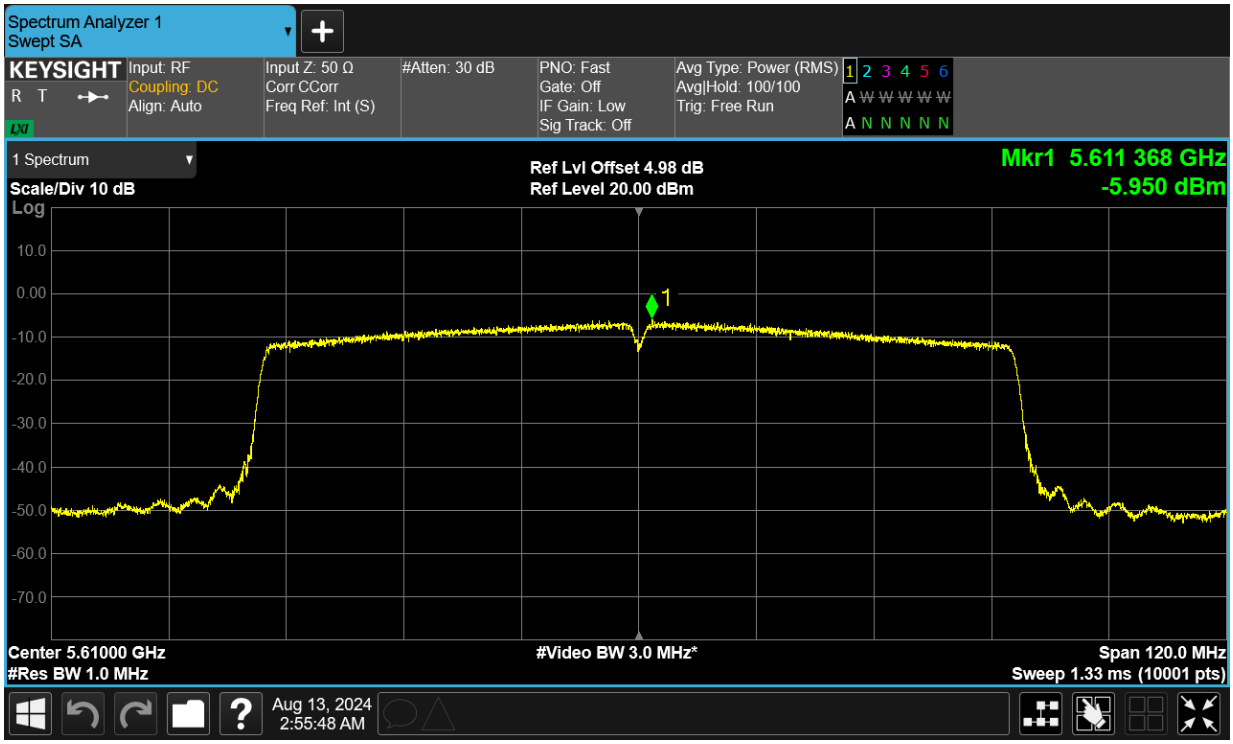
PSD NVNT ac40 5670MHz Ant1



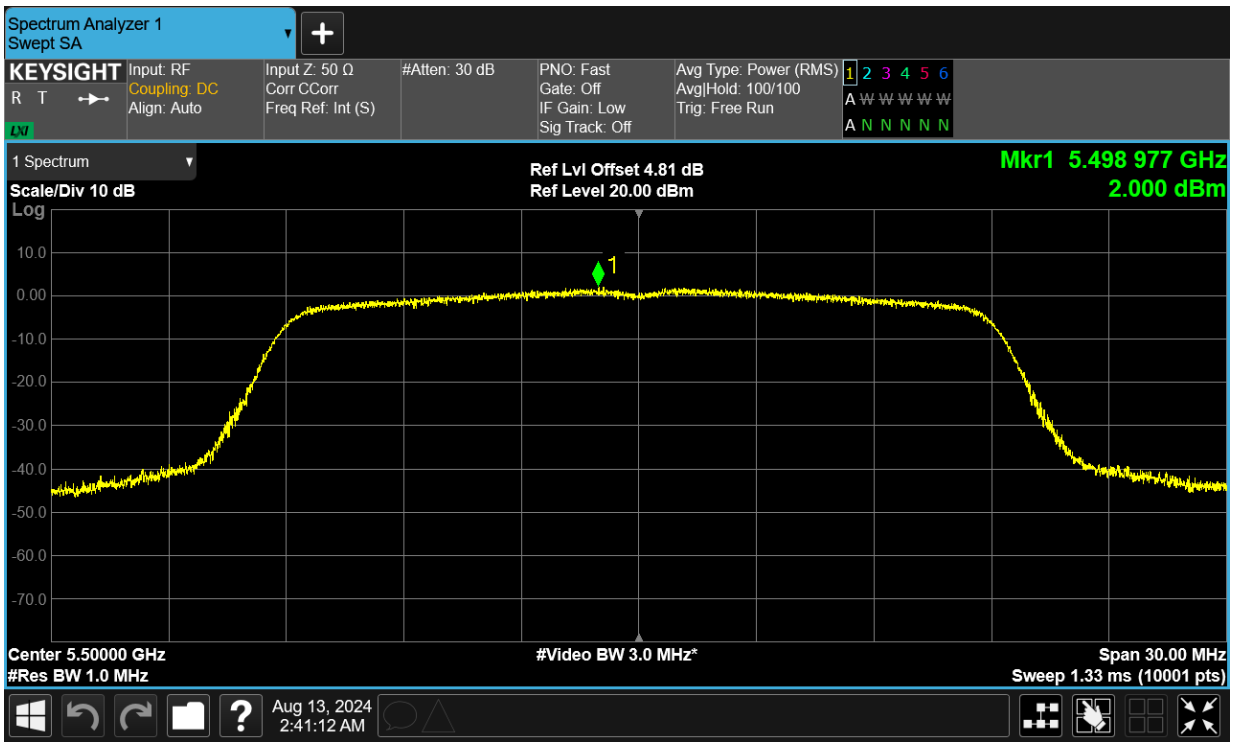
PSD NVNT ac80 5530MHz Ant1



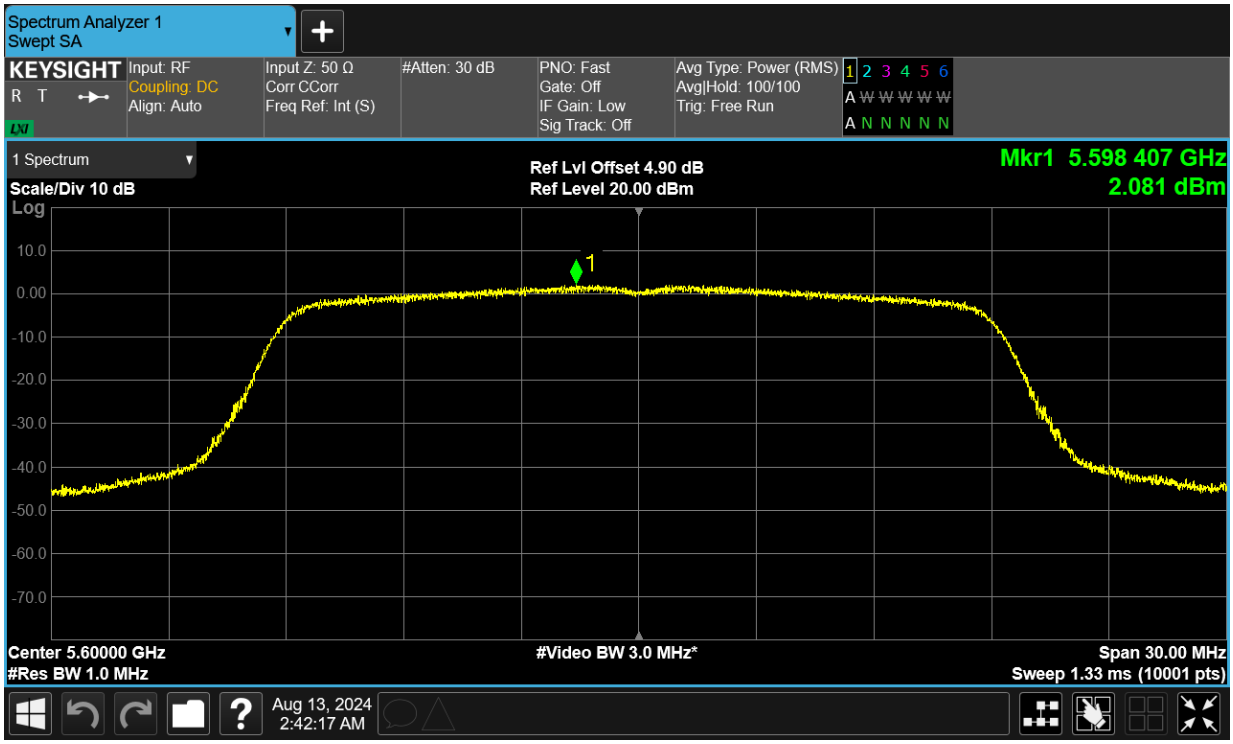
PSD NVNT ac80 5610MHz Ant1



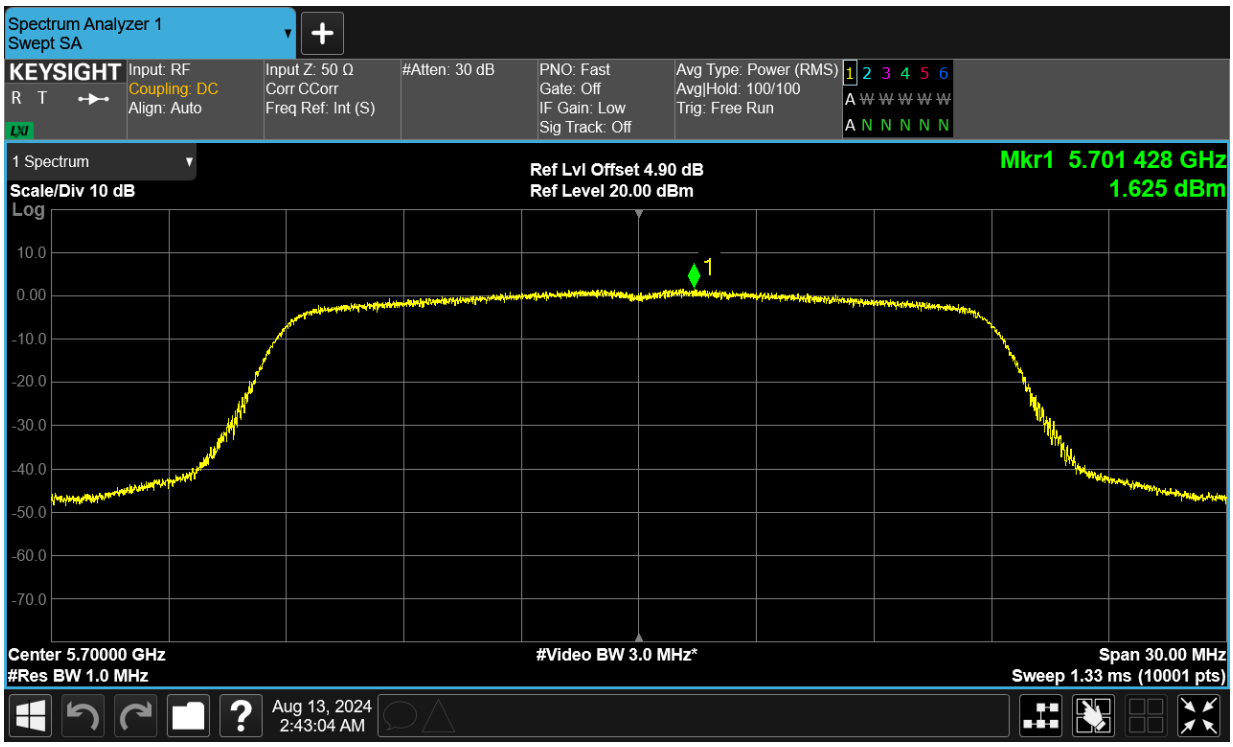
PSD NVNT n20 5500MHz Ant1



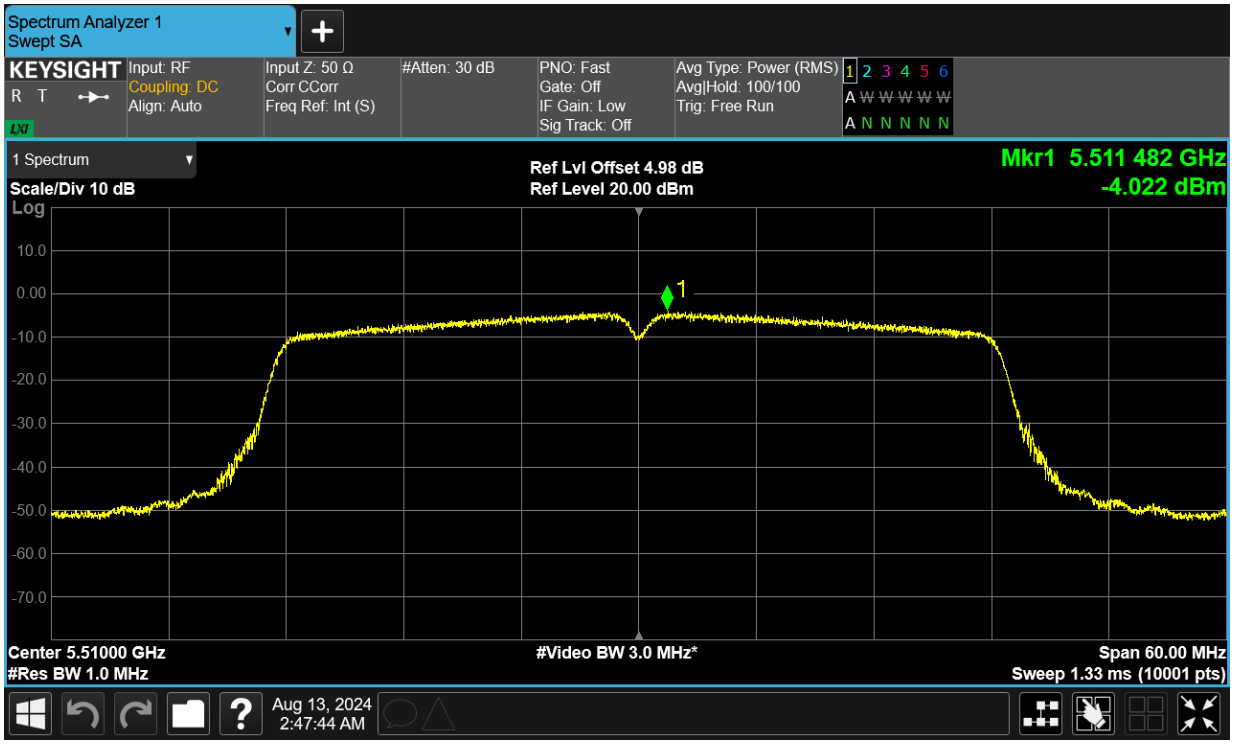
PSD NVNT n20 5600MHz Ant1



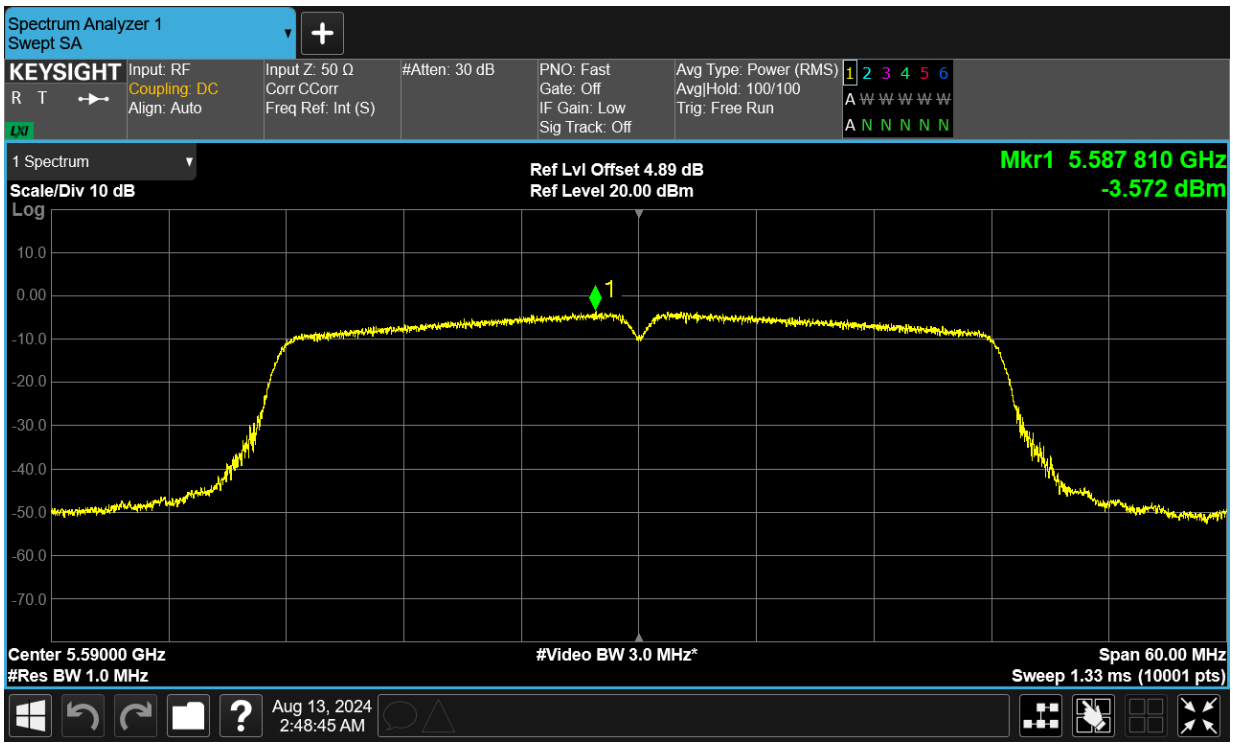
PSD NVNT n20 5700MHz Ant1



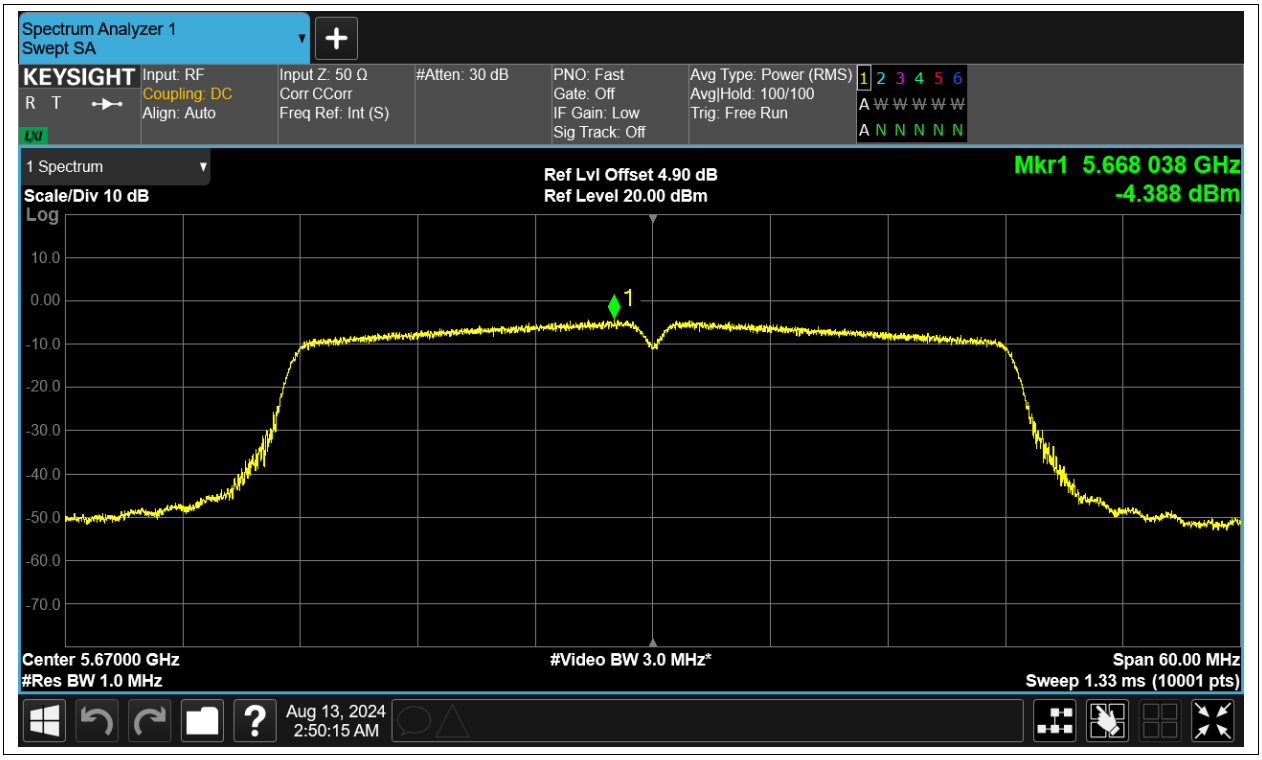
PSD NVNT n40 5510MHz Ant1



PSD NVNT n40 5590MHz Ant1



PSD NVNT n40 5670MHz Ant1


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 4.90 dB
Ref Level 20.00 dBm
Mkr1 5.668 038 GHz
-4.388 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 5.67000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Span 60.00 MHz
Sweep 1.33 ms (10001 pts)
Aug 13, 2024
2:50:15 AM